Chapter 4: Collaboration

The Cisco collaboration portfolio consists of Cisco Unified Communications, Cisco TelePresence, and Cisco WebEx solutions and services, all of which use the network as the platform to help enable people to connect, communicate, and collaborate from any application, device, and workspace.

This chapter includes the following three sub-chapters: Unified Communications, Video, and WebEx.

Unified Communications At-a-Glance

Product	Features	Page
COMMUNICATIONS INFRASTRUCTURE		
Cisco AS5350XM Universal Gateway	High performance, 1RU universal gateway offering best in class voice, fax, remote access and session border control services • Cisco SMARTnet services available	4–6
Cisco AS5400XM Universal Gateway	High performance, 2RU universal gateway offering best in class voice, fax, remote access and session border control services • Cisco SMARTnet services available	4–8
Cisco AS5850 Universal Gateway	High density universal gateway for service providers and large enterprises • Cisco SMARTnet services available	4–10
Cisco Unified Border Element	• An application that terminates and reoriginates both signaling (H.323 and Session Initiation Protocol [SIP]) and media streams (Real-Time Transport Protocol [RTP] and RTP Control Protocol [RTCP]) while performing border interconnection services between IP networks. • Cisco SMARTnet services available	4–12
Cisco Voice Gateways	Dedicated Cisco VG202, VG204, VG224, and VG248 Analog Voice Gateways provide connectivity between IP networks and traditional telephones. • Cisco SMARTnet services are available.	4–13
Cisco MCS 7800 Series Media Convergence Servers	High availability server platform for Cisco IP telephony systems • Cisco SMARTnet services available	4–14
IP TELEPHONY		
Cisco ATA Analog Telephone Adapters	Turns any analog telephone into an IP telephone. Each of the two voice ports supports independent telephone numbers, providing two separate lines • Cisco SMARTnet services available	4–16
Cisco Smart Business Communications System	The Cisco Smart Business Communications System is a complete voice and unified communication system for small businesses with up to 50 users with expansion capabilities to 64 users. • Cisco SMARTnet services available	4–17
Cisco Unified Communications Manager	The server-based call-processing and call-control component of the Cisco Unified Communications Solution, offering a suite of integrated voice applications and utilities. • Available as an appliance, it is accessible through a GUI and a command-line interface. • Essential Operate Services (ESW) are required based on server platform.	4–18
Cisco Unified Communications Manager Assistant	A component of the Cisco Unified Communications Manager, this PC and phone application provides productivity tools that enhance communications between manager and administrative assistant. • No separate services required	4–21
Cisco Unified Communications Manager Business Edition	Cisco Unified Communications Manager Business Edition is designed for medium-sized businesses with up to 500 employees and up to 20 sites (19 remote sites). • The solution offers Cisco Unity Connection-based integrated voice-messaging capabilities. • Essential Operate Services (ECD) that covers the MCS server hardware replacement and software support are required.	4–21
Cisco Unified Communications Manager Express	Cisco IOS Software-based call control supported on standard Cisco Integrated Services Routers • Included in the Cisco SMARTnet services when originally purchased router or Cisco Unified Communications 500 Series for Small Business.	4–22

Cisco Unified Survivable Remote Site Telephony (SRST)	Cisco Unified Survivable Remote Site Telephony (SRST) Software is a Cisco IOS Software-based feature set that provides key backup telephony functions for the remote branch office if connectivity to the centrally-located Cisco Unified Communications Manager fails (that is, a WAN link is interrupted). During a WAN outage, the Cisco Unified SRST-enabled router provides robust telephony services (including off-net calls to 911).	4–23
Cisco Unified IP Phones 3900 Series	An affordable, entry-level single-line SIP-based endpoint designed for environments with low communication needs such as lobbies, hallways, cafeterias, classrooms and can be used within retail and manufacturing environments.	4–24
Cisco Unified IP Phones 6900 Series ***NEW***	An affordable, easy-to-use portfolio of endpoints that deliver business-grade voice communication services to branch, midmarket and enterprise customers.	4–25
Cisco Unified IP Phones 7900 Series	A stylish and diverse endpoint portfolio, supporting advanced business communications to meet a wide range of customer needs from the lobby to the conference room to the executive office and everywhere in between; choice of wired, wireless LAN and specialty endpoint solutions. · Cisco SMARTnet services available	4–26
Cisco Unified Attendant Consoles Portfolio ***NEW***	The Cisco Unified Attendant Console Portfolio comprises three full-featured software-based attendant console solutions designed specifically for use with Cisco Unified Communications Manager and include: · The Cisco Unified Department Attendant Console is designed for departmental use · The Cisco Unified Business Attendant Console is designed for the Cisco Unified Communications Manager Business Edition · The Cisco Unified Enterprise Attendant Console is designed for the larger enterprise customer · Essential Operate Services (ESW) are required for software.	4–28
UNIFIED COMMUNICATIONS APPLICATIONS		
Cisco Emergency Responder	Works with Cisco Unified Communications Manager to automatically provide E9-1-1 features in North America; intra-enterprise features are also compatible with any internal or external emergency number · Essential Operate Services (ESW) for the software license and per seat	4–29
Cisco IP Communicator	A software-based application that delivers enhanced telephony support through the PC, allowing remote users to take their office extension with them · Essential Operate Services (ESW) required for User License	4–30
Cisco Unified Application Environment	Offers a rich portfolio of applications and development tools that extend the Cisco Unified Communications platform · Broad support for development tools, including Eclipse and Microsoft Visual Studio; allows unified communication and network services to be quickly and easily integrated into business applications or to develop entirely new applications	4–31
Cisco Unified MeetingPlace Conferencing	Cisco Unified MeetingPlace conferencing provides integrated voice, video, and Web collaboration for large organizations. It facilitates media-rich collaboration for Cisco Unified Communications solutions and allows on-premises voice conferencing for WebEx. · Essential Operate Services (ESW) are required for most features.	4–32
Cisco Unified MeetingPlace Express	Cisco Unified MeetingPlace Express is an integrated voice, video, and web collaboration solution for midsize organizations. · It facilitates media-rich collaboration for Cisco Unified Communications solutions. · This on-premises solution offers cost savings and security. · It is easy to deploy and manage. · Essential Operate Services (ESW) are required for most features.	4–33
Cisco Unified Personal Communicator	It transparently integrates your most frequently used communications applications and services into a single, unified client. · From an easy-to-use interface on a PC or Mac, it provides quick and easy access to powerful communications tools—softphone, presence, instant messaging, visual voicemail, click to call, employee directory, communication history, video, and web conferencing—to help you communicate effectively and work more productively. · Essential Operate Services (ESW) are required for User License.	4–34

Cisco Unified Presence	• This standards-based platform collects information from multiple sources about user availability and communications capabilities to provide rich presence status and facilitate presence-enabled communications with Cisco Unified Communications and other critical business applications. • It enables sharing of presence and IM with Cisco Unified Personal Communicator. • It supports the ability to view phone presence from Cisco Unified Personal Communicator, IBM Lotus Sametime, or Microsoft Office Communicator. • It facilitates the ability to expose presence in corporate web directories, point-of-sale applications, or customer-relationship-management systems through standards-based application programming interfaces (APIs). • It provides the ability for subject matter experts anywhere in your enterprise to handle incoming customer calls with Cisco Unified Expert Advisor and Cisco Unified Personal Communicator. • Essential Operate Services (ESW) are required for most features.	4–35
Cisco UC Integration for Microsoft Office Communicator	Instantly access enhanced Cisco Unified Communications directly from Microsoft Office Communicator 2007 on your PC. With this easy-to-deploy desktop integration, extend proven Cisco unified communications services to your workspace and benefit from the investment protection and reduced complexity delivered by a single call control solution.	4–35
Cisco Unity Connection	• An enterprise-class voice and integrated messaging solution that adds speech recognition and call routing rules on a Linux appliance • Essential Operate Services (ESW) are required for Voice Mail Boxes	4–36
Cisco Unity Express	Integrated voice mail, automated attendant, IVR, and time card services locally delivered for small businesses or branch offices. Takes advantage of the data infrastructure; supported on a broad range of Cisco access routers and new Cisco Integrated Services Routers. • Cisco SMARTnet services available.	4–37
Speech Connect for Cisco Unity	Speech Connect for Cisco Unity offers unmatched performance in speech recognition because of advanced disambiguation, the Names Tuning service, and a dynamic names dictionary	4–37
Cisco Unity Unified Messaging	A unified messaging system that delivers voice, e-mail, and fax messages into single inbox for access through phone, e-mail, and many other clients and devices. • Essential Operate Services (ESW) are required for Voice Mail Boxes (VM or UM).	4–38
Cisco Unified Messaging Gateway	An open and secure method of intelligently routing messages and exchanging subscriber and directory information within a unified messaging network; it acts as the central hub in a network of voice and unified messaging solutions • Cisco Unified Messaging Gateway includes Software Application Support and Software Applications Support with Upgrades (SAS/SASU)	4–38
Cisco Voice and Security Bundles	Voice and security bundles are designed for enterprise branch offices, small and medium-sized businesses (SMBs), and managed network service providers seeking consolidated, easy-to-order, versatile, and cost-effective solutions.	4–39
MOBILITY		
Cisco Unified Mobile Communicator	Cisco Unified Mobile Communicator enables collaboration by securely extending Cisco Unified Communications to your mobile smartphone. • Cisco Unified Mobile Communicator provides real-time access to company directory, presence, visual voice mail, integrated call history, and conference notifications and other vital information; so you always have the information you need at your fingertips when you are on the go. • Essential Operate Services (ESW) are required for most features.	4–40
Cisco Unified Mobility	A mobility application, native to Cisco Unified Communications Manager, which extends call control capabilities to mobile devices, provides redirection of incoming calls to up to four different designated devices simultaneously (single number reach/single business voicemail) and enables the transition of calls between Cisco Unified IP Phones and mobile devices.	4–41
Cisco WebEx Meeting Center on the iPhone	A free downloadable application for the iPhone that allows users to actively collaborate in Cisco WebEx Meeting Center meetings. iPhone users can view what's being shared, see the meeting participant list, see the active speaker and chat with other meeting participants.	4–41
Cisco WebEx Meeting Center on Smartphone Browsers	Using the browser on a smartphones, users can attend Cisco WebEx Meeting Center meetings, view presentations applications and desktops with live annotations.	4–41

Cisco Mobile Supervisor	A free application available from Apple Inc's App Store. Cisco Mobile Supervisor is an extension to the Cisco Supervisor Desktop (CSD) on a mobile device. As an extension to your Cisco Unified Contact Center Express (Unified CCX) product, contact center supervisors can receive real-time performance metrics on their iPhone3G and iPod touch devices	4–41
Nokia Call Connect for Cisco	Enables Nokia business-class dual-mode handsets to operate on cellular Global System for Mobile Communications (GSM) and Cisco Unified Wireless Networks (VoWLAN/802.11 b/g) with access to the advanced features provided by Cisco Unified Communications Manager and Cisco Unified Communications Manager Express.	4–42
CUSTOMER CONTACT		
Cisco Unified Contact Center Enterprise	Cisco Unified Contact Center Enterprise delivers multisite, intelligent contact routing, network-to-desktop computer telephony integration (CTI), and multichannel contact management to contact center agents over an all-IP infrastructure or mixed IP and time-division multiplexing (TDM) infrastructure. It offers: · Essential Operate Services (ESW) required for most features	4–42
Cisco Unified Contact Center Express	This software-based automatic call distributor (ACD), IVR, and CTI application is designed for small-to-medium-sized companies, enterprise branches, or corporate departments with Cisco IP Telephony networks. The solution supports up to 300 agents and is available in three versions: Standard, Enhanced, and Premium, to better match product functions with your customer contact interaction management requirements. The solution offers: · Essential Operate Services (ESW) required for only the Agents	4–43
Cisco Unified Contact Center Hosted	Cisco Unified Contact Center Hosted is suitable for both enterprise customers and service providers. · The service provider hosts the contact-center infrastructure software, which is shared by multiple business customers, in its central office or data center. · Essential Operate Services (ESW) required for most features.	4–44
Cisco Unified Customer Voice Portal	Cisco Unified Customer Voice Portal delivers intelligent, personalized self-service over the phone. It allows customers to efficiently and enjoyably retrieve the information they need from the contact center. The solution: · Offers a prompt collect, queuing, and call-control service using standard IP technologies · Provides sophisticated voice and video self-service options with the ability to quickly and easily escalate to assisted service as required · Essential Operate Services (ESW) are strongly recommended	4–44
Cisco Unified Expert Advisor	Cisco Unified Expert Advisor expands the scope of the contact center by allowing enterprise knowledge workers to handle incoming customer calls without the need for the rigid tools and business rules typically found in formal contact centers. The solution allows subject matter experts across the enterprise to assist with customer care, with or without a formal contact center. · Essential Operate Services (ESW) are strongly recommended	4–45
Cisco Unified Intelligence Suite	The Cisco Unified Intelligence Suite offers customers a powerful Web-based reporting platform that is as flexible as it is intuitive. Customers can report on the details of every contact across all channels from a single interface, regardless of the resources involved. · Essential Operate Services (ESW) required for most features	4–46
Cisco Unified Intelligent Contact Management Enterprise	Cisco Unified Intelligent Contact Management Enterprise provides call routing and CTI for multisite, TDM-based or IP-based contact centers in a distributed, fault-tolerant architecture. It offers: · Cisco Pre-Routing and Cisco Post-Routing, customer profile routing (CPR), and enterprise reporting · True Virtual ACD capabilities with third party PBXs · Essential Operate Services (ESW) required for most features	4–46
Cisco Unified Intelligent Contact Management Hosted	Cisco Unified Intelligent Contact Management Hosted helps service providers address a full range of business opportunities. It offers: · Open architecture · An Expert Advisor option—Expanding the scope of the contact center by allowing presence-enabled enterprise knowledge workers to handle incoming customer contacts · Essential Operate Services (ESW) required for most features	4–47
SOFTWARE SUBSCRIPTION AND LICENSING		

Cisco Unified Workspace Licensing	Cisco Unified Workspace Licensing allows organizations to cost-effectively access a wide range of Cisco Unified Communications applications and services in a cost-effective, simple package. It includes client and server software, licensing, service and support, and software subscription on a per-user basis.	4–48
Cisco Unified Communications Software Subscription	Cisco Unified Communications Software Subscription allows you to purchase major software version upgrades of various Cisco Unified Communications products at a reduced cost through a 1-, 2-, 3- or 5-year subscription.	4–49
SERVICES		
Cisco Unified Communications Services	Services, delivered by Cisco and our partners, help organizations deploy a secure, resilient Cisco Unified Communications solution, enabling powerful ways to collaborate with coworkers, partners, and customers across any workspace.	4–50

Video At-a-Glance

Cisco TelePresence System	The Cisco TelePresence system integrates advanced audio, high-definition video, and interactive elements with the power of the underlying network to deliver an immersive in-person experience. • The system supports life-like images with ultra high-definition video and spatial audio. • The system integrates cameras, a lighting array, microphones, and speakers, all tuned to optimize the experience. • Integration with enterprise groupware, such as Microsoft Exchange and Lotus Notes, makes it easy to schedule and launch calls. • The solution offers scalable, no-latency multipoint meetings for up to 48 sites, interoperability with video conferencing, and secure and scalable intercompany calling. • Specialized applications such as Cisco TelePresence Expert on Demand and Cisco TelePresence Recording Studio take Cisco TelePresence beyond business meetings for new face-to-face interactions and transactions. • Operates on an integrated voice, video, and data network with intelligent architecture capabilities for ensuring reliability, quality of service (QoS), and security.	4–50
Cisco TelePresence System 500	The smaller footprint of the Cisco TelePresence System 500 gives organizations the flexibility to deploy Cisco TelePresence within personal offices to support one-on-one meetings, or to join large, multipoint Cisco TelePresence calls.	4–51
Cisco TelePresence System 1000	The Cisco TelePresence System 1000 is ideal for small group or one-on-one meetings around the "virtual table".	4–53
Cisco TelePresence System 1300 ***NEW***	The new Cisco TelePresence System 1300 is a single-screen system designed for the general-purpose room. With a streamlined industrial design and three cameras, it can support up to six people without requiring a dedicated conference room. The endpoint also features integrated audio conferencing capabilities and innovations that reduce bandwidth requirements.	4–54
Cisco TelePresence System 3000	The Cisco TelePresence System 3000 is an ideal endpoint for group meetings, creating an environment for six people to sit around the "virtual table" in a single location.	4–55
Cisco TelePresence System 3200	The Cisco TelePresence System 3200 enables organizations to host up to 18 meeting participants in a single large room.	4–56
Cisco TelePresence Manager	Cisco TelePresence Manager software makes it easy for you to schedule and manage Cisco TelePresence calls.	4–58
Cisco TelePresence Multipoint Switch	Easily and reliably include three or more locations in a single meeting, with support for up to 48 locations.	4–59
Cisco TelePresence Recording Server ***NEW***	The Cisco TelePresence Recording Server transforms the Cisco TelePresence system into a high-definition recording studio.	4–60
Cisco Unified Video Advantage	• Video is now just a phone call. Cisco Unified Video Advantage brings video communications to Cisco Unified IP Phones and Cisco IP Communicator • Cisco SMARTnet services available	4–62
Cisco Unified Videoconferencing 3500 Series Products	The Cisco Unified Videoconferencing 3500 Series provides a flexible, cost-effective video infrastructure for Cisco Unified Communications solutions. • It supports multiple standards, codecs, and protocols for broad connectivity with room-based and desktop video, including standard-definition and high-definition endpoints. • It facilitates voice and video interoperability for Cisco TelePresence solutions. • Includes Software Application Support and Software Applications Support with Upgrades (SAS/SASU)	4–62

Cisco Physical Security	For product information on Cisco Video Surveillance products, see Chapter 5, "Security".	See 5–1
Cisco Digital Media System	For product information, see Chapter 7, "Video and Broadband Cable".	See 7–1

WebEx At-a-Glance		
Cisco WebEx Meeting Center	Cisco WebEx Meeting Center allows business professionals to easily and reliably reach across the web to collaborate and work, inside or outside their organization.	4–64
Cisco WebEx Training Center	Cisco WebEx Training Center is an online classroom solution that enables you to deliver dynamic, interactive learning to anyone who has web access and a browser.	4–64
Cisco WebEx Event Center	Cisco WebEx Event Center is an online events- and webinar application for you to manage the entire online event lifecycle from planning, promoting, and presenting to follow-up and analysis	4–65
Cisco WebEx Support Center	Cisco WebEx Support Center enables IT and customer support to reduce costs, increase the productivity of their technical support representatives, reduce customer downtime, and increase customer satisfaction by improving the efficiency and effectiveness of remote support.	4–65
Cisco WebEx Connect	Cisco WebEx Connect is an enterprise-class, on-demand unified communications client that delivers instant messaging, rich presence, and team spaces to bring people, data, and processes together.	4–66
SERVICES		
Cisco WebEx Advanced Services	Cisco WebEx Advanced Services can help you reach and exceed your collaboration goals with a range of services that can be tailored to your organization. Our teams follow industry standard project management processes while leveraging the Cisco lifecycle approach to service engagements. Allow our consultants to assess your collaboration requirements and develop a plan to reach your goals. The five pillars of Advanced Services are Implementation/Adoption, eLearning & eMarketing Consulting, Personalized Training, Product Customization and Video webcasting.	4–67

Product Ordering Website

To place an order or for more part numbers, visit: http://www.cisco.com/en/US/ordering/index.shtml.
This chapter only provides a small subset of all part numbers available. See the URL listed in the "For More Information" section of each product to get a complete list of part numbers.

Unified Communications

Cisco AS5350XM Universal Gateway

The Cisco AS5350XM Universal Gateway is a 1-rack-unit (1RU) gateway supporting 2- to 16-port T1/E1 or 1 CT3 configurations. The Cisco AS5350XM provides voice, fax, data, and session-border-control (SBC) services on any port at any time. This cost-effective platform is ideally suited for service provider and enterprise environments.

Ideal for Companies That Need These Features

Cisco AS5350XM Universal Gateway

- High density in a small footprint (up to 20 CT1/CE1 or 1 CT3, any codec type, fax protocol or modem type)
- High-performance voice, fax, data, and session-border-control (SBC) services
- Concurrent voice gateway and SBC
- High call rates (up to 20 calls per second)
- Enhanced performance for processor-intensive Tool Command Language (TCL) or VoiceXML scripting for complex voice services
- T.38 real-time fax relay, T.37 fax store and forward, fax detection, and unified communications

Key Features

- The Cisco AS5400XM Universal Gateway is ideally suited for service provider and enterprise environments that require innovative voice, fax, and data services.
- This universal gateway has a 2-rack unit (2RU), CT3-capable universal gateway with hot-swappable cards and internal redundant power supply.

- This universal gateway offers best-in-class voice, fax, remote access, and session-border-control (SBC) services.
- The gateway provides concurrent gateway and SBC operation.
- This gateway includes the following feature cards: 4 or 8 T1/E1/Primary Rate Interface (PRI) feature cards (ISDN calls terminated on the card); one CT3 feature card; a 60- or 108-channel universal port feature card; and a 384-channel voice feature card.
- This gateway has two 10/100/1000 autosensing Gigabit Ethernet LAN ports.
- This gateway has redundant 8-Mbps serial backhaul ports for Frame Relay, High-Level Data Link Control (HDLC) or Point-to-Point Protocol (PPP) WAN backhaul.
- The gateway provides one fast console port for local administrative access and one auxiliary port for remote administrative access, as well as redundant LAN and WAN backhaul ports.
- The gateway is European Telecommunications Standards Institute/Network Equipment Building Standards (ETSI/NEBS) Level 3 compliant, and has a redundant AC or DC power supply with dual fans.
- The gateway is interoperable with the Cisco Signaling System 7 (SS7) Interconnect for Voice Gateway (signaling gateway).

Specifications

Feature	Cisco AS5350XM
Processor	750 MHz RISC processor
SDRAM	512 MB (default), 1 GB (maximum)
System Flash	128 MB (default), 1 GB (maximum)
Feature Card Slots	3 slots
Trunk Feature Cards	2 T1/E1/PRI, 4 T1/E1/PRI, 8 T1/E1/PRI, 1 CT3
DSP Feature Cards	60 Universal port card, 108 Universal port card 384 port voice/fax card
Egress Ports	2 10/100/1000 autosensing Gigabit Ethernet LAN ports 2 8-Mbps serial ports T1/E1 DS1 and CT3 trunk feature cards
LAN Protocols	IP, IPX, AppleTalk, DECnet, ARA, NetBEUI, bridging, HSRP, 802.1Q
WAN Protocols	Frame Relay, PPP, HDLC (leased line)
Routing Protocols	Routing Information Protocol (RIP), RIPv2, OSPF, IGRP, EIGRP, BGPv4, IS-IS, AY-EIGRP, IPX-EIGRP, Next Hop Resolution Protocol (NHRP), AppleTalk Update-based Routing Protocol (AURP)
QoS Protocols	IP Precedence, Resource Reservation Protocol (RSVP), Weighted Fair Queuing (WFQ), Weighted Random Early Detection (WRED), Multichassis Multilink PPP (MMP), fragmentation and interleaving, 802.1P
Access Protocols	PPP, Serial Line Internet Protocol (SLIP), TCP Clear, IPXCP, ATCP, ARA, NBFCP, NetBIOS over TCP/IP, NetBEUI over PPP, protocol translation (PPP, SLIP, ARA, X.25, TCP, local-area transport [LAT], Telnet), and Xremote
Bandwidth Optimization	Multilink PPP (MLPPP), TCP/IP header compression, Bandwidth Allocation Control Protocol (BACP)
Voice Compression	G.711, G.723.1 (5.3K and 6.3K), G.726, G.729ab, G. Clear, GSM-FR, AMR-NB, iLBC
DSP Voice Features	Echo cancellation, programmable up to 128 MB; Voice activity detection, silence suppression, comfort noise generation; Fixed and adaptive jitter buffering; Call progress tone detection and generation—Dial tone, busy, ring-back, congestion, and re-order tones with local country variants; DTMF, Multifrequency (MF); Continuity Testing (COT)
Voice and Fax Signaling Protocols	H.323v2, H.323v3, H.323v4, SIP, MGCP 1.0, TGCP 1.0, Voice XML, Real-Time Streaming Protocol (RTSP), Extended Simple Mail Transfer Protocol (ESMTP); T.38 real-time fax relay; T.37 fax store and forward; Fax detection; Fax and modem passthrough; Open Settlements Protocol (OSP); Media Recording Control Protocol (MRCP); TTS Servers; ASR Servers
SS7	Integrated Signaling Link Terminal (ISLT), MTP1, MTP2, IUA, RUDP backhaul
Network Security	RADIUS or TACACS+, PAP, CHAP, and MSCHAP authentication, local user/password database DNIS, CLID, call-type pre-authentication Inbound/outbound traffic filtering (including IP, IPX, AppleTalk, bridged traffic) Network Address Translation (NAT) and dynamic access lists (ACLs) SNMPv2, SNMPv3, SSHv2 H.235

Virtual Private Networking	IP Security (IPSec) and policy enforcement (RADIUS or TACACS+) L2TP, Layer 2 Forwarding (L2F), and generic routing encapsulation (GRE) tunnels Firewall security and intrusion detection QoS features (committed access rate [CIR], Random Early Detection [RED], IP Precedence, policy-based routing)
Session Border Control	H.323 to H.323 (including Cisco Unified Communications Manager); H.323 to SIP (including Cisco Unified Communications Manager); SIP to SIP (including Cisco Unified Communications Manager); 1000 concurrent calls with 2000 sessions in flow-through mode
Channelized T1	Robbed-bit signaling; Loop Start; Immediate Start, and Wink Start Protocols
Channelized E1	CAS, PR1, E1 R2, leased line, Frame Relay, G.703, G.704
ISDN Protocols Supported	Sync mode PPP, V.110 at rates up to 38400 bps; Network- and user-side ISDN; NFAS with backup D-channel; QSIG, Feature Group B, Feature Group D; DoVBS
Modem Protocols Supported	V.90 or V.92 standard supporting rates of 56000 to 28000 in 1333 bps increments; V.92 Modem on Hold and Quick Connect; V.44 Compression supporting increased throughput by more than 100 percent for Internet browsing; K56Flex at 56000 to 32000 in 2000-bps increments ITU-T V.34 Annex 12 at 33600 and 31200 bps; ITU-T V.34 at 28800, 26400, 24000, 21600, 19200, 16800, 14400, 12000, 9600, 7200, 4800, or 2400 bps; V.32bis 14400, 12000, 9600, 7200, 4800; V.32 9600, 4800; V.22bis 2400, 1200; V.21 300; Bell 103, 300; V.22 1200; V.23 1200/75; ITU-T V.42 (including Microcom Networking Protocol [MNP] 2-4 and Link Access Procedure for Modems [LAPM] error correction; ITU-T V.42bis (1000 nodes) and MNP 5 data compression; Async-mode PPP
Full Cisco IOS Software Support	IP Plus and Enterprise Plus feature sets including 3DES and Lawful Intercept images
Console and Auxiliary Ports	Asynchronous serial (RJ-45)
Chassis	Dimensions (H x W x D): 1.75 x 17.5 x 20.5 in.; Weight (fully loaded): 22 lbs. (10 kg)
Memory Information	• Main SDRAM—2 slots, 512 MB default memory, 1 GB max memory • System Flash—1 slot, 128 MB default memory, 1 GB max memory

For More Information

For more information about the Cisco AS5350XM Universal Gateway, visit:
http://www.cisco.com/en/US/products/hw/iad/index.html.

Cisco AS5400XM Universal Gateway

The Cisco AS5400XM Universal Gateway offers exceptional capacity in only two rack units (2RU) and provides voice, fax, and data services on any port at any time. High-density (up to one CT3 of voice over IP [VoIP] and two CT3 of time-division multiplexing [TDM] switching), low-power consumption (as low as 3.5A at 48 VDC per CT3 of G.711), and universal port digital signal processors (DSPs) make the Cisco AS5400XM Universal Gateways ideal for many network deployment architectures, especially co-location environments and mega points of presence (POPs).

Ideal for Companies That Need These Features

Cisco AS5400XM Universal Gateway

- High density in a small footprint (up to 20 CT1/CE1 or 1 CT3, any codec type, fax protocol or modem type)
- High-performance voice, fax, data, and SBC services
- Concurrent voice gateway and SBC
- High call rates (up to 20 calls per second)
- Enhanced performance for processor-intensive TCL or VoiceXML scripting for complex voice services
- T.38 real-time fax relay, T.37 fax store and forward, fax detection, and unified communications

Key Features

- The Cisco AS5400XM Universal Gateway is ideally suited for service provider and enterprise environments that require innovative voice, fax, and data services.
- This universal gateway has a 2-rack unit (2RU), CT3-capable universal gateway with hot-swappable cards and internal redundant power supply.
- This universal gateway offers best-in-class voice, fax, remote access, and session-border-control (SBC) services.
- The gateway provides concurrent gateway and SBC operation.

- This gateway includes the following feature cards: 4 or 8 T1/E1/Primary Rate Interface (PRI) feature cards (ISDN calls terminated on the card); one CT3 feature card; a 60- or 108-channel universal port feature card; and a 384-channel voice feature card.
- This gateway has two 10/100/1000 autosensing Gigabit Ethernet LAN ports.
- This gateway has redundant 8-Mbps serial backhaul ports for Frame Relay, High-Level Data Link Control (HDLC) or Point-to-Point Protocol (PPP) WAN backhaul.
- The gateway provides one fast console port for local administrative access and one auxiliary port for remote administrative access, as well as redundant LAN and WAN backhaul ports.
- The gateway is European Telecommunications Standards Institute/Network Equipment Building Standards (ETSI/NEBS) Level 3 compliant, and has a redundant AC or DC power supply with dual fans.
- The gateway is interoperable with the Cisco Signaling System 7 (SS7) Interconnect for Voice Gateway (signaling gateway).

Specifications

Feature	Cisco AS5400XM
Processor	750 MHz RISC processor
Calls Supported	Voice, fax, and remote access services to 648 concurrent calls (to 1CT3/16E1s)
SDRAM	512 MB (default), 1 GB (maximum)
Boot Flash	N/A
System Flash	128 MB (default), 1 GB (maximum)
Feature Card Slots	7
Trunk Feature Cards	4 T1/E1/PRI, 8 T1/E1/PRI, 1 CT3
DSP Feature Cards	60 Universal port card, 108 Universal port card 384 low complexity, 192 medium complexity or 144 high complexity port voice/fax card
Egress Ports	2 10/100/1000 autosensing Gigabit Ethernet LAN ports 2 8-Mbps serial ports; T1/E1 DS1 and CT3 trunk feature cards
LAN Protocols	IP, IPX, AppleTalk, DECnet, ARA, NetBEUI, bridging, HSRP, 802.1Q
WAN Protocols	Frame Relay, PPP, HDLC (leased line)
Routing Protocols	Routing Information Protocol (RIP), RIPv2, OSPF, IGRP, EIGRP, BGPv4, IS-IS, AY-EIGRP, IPX-EIGRP, Next Hop Resolution Protocol (NHRP), AppleTalk Update-based Routing Protocol (AURP)
QoS Protocols	IP Precedence, Resource Reservation Protocol (RSVP), Weighted Fair Queuing (WFQ), Weighted Random Early Detection (WRED), Multichassis Multilink PPP (MMP), fragmentation and interleaving, 802.1P
Access Protocols	PPP, Serial Line Internet Protocol (SLIP), TCP Clear, IPXCP, ATCP, ARA, NBFCP, NetBIOS over TCP/IP, NetBEUI over PPP, protocol translation (PPP, SLIP, ARA, X.25, TCP, local-area transport [LAT], Telnet), and Xremote
Bandwidth Optimization	Multilink PPP (MLPPP), TCP/IP header compression, Bandwidth Allocation Control Protocol (BACP)
Voice Compression	G.711, G.723.1 (5.3K and 6.3K), G.726, G.729ab, G. Clear, GSM-FR, AMR-NB, iLBC
DSP Voice Features	Echo cancellation, programmable up to 128 MB; Voice activity detection, silence suppression, comfort noise generation; Fixed and adaptive jitter buffering; Call progress tone detection and generation—Dial tone, busy, ring-back, congestion, and re-order tones with local country variants; DTMF, Multifrequency (MF); Continuity Testing (COT)
Virtual Private Networking	IP Security (IPSec) and policy enforcement (RADIUS or TACACS+) L2TP, Layer 2 Forwarding (L2F), and generic routing encapsulation (GRE) tunnels Firewall security and intrusion detection QoS features (committed access rate [CIR], Random Early Detection [RED], IP Precedence, policy-based routing)
Session Border Control	H.323 to H.323 (including Cisco Unified Communications Manager); H.323 to SIP (including Cisco Unified Communications Manager); SIP to SIP (including Cisco Unified Communications Manager) 1000 concurrent calls with 2000 sessions in flow-through mode

Voice and Fax Signaling Protocols	H.323v2, H.323v3, H.323v4, SIP, MGCP 1.0, TGCP 1.0, Voice XML, Real-Time Streaming Protocol (RTSP), Extended Simple Mail Transfer Protocol (ESMTP); T.38 real-time fax relay; T.37 fax store and forward; Fax out (transmission) Group 3, standards EIA 2388 Class 2 and EIA 592 Class 2.0 at modulations V.33, V.17, V.29, V.27ter, V.21; ITU-T T.30, T4; Fax detection; Fax and modem passthrough; Open Settlements Protocol (OSP), Media Recording Control Protocol (MRCP); TTS Servers; ASR Servers
Channelized T1	Robbed-bit signaling; Loop Start; Immediate Start, and Wink Start Protocols
Channelized E1	CAS, PR1, E1 R2, leased line, Frame Relay, G.703, G.704
ISDN Protocols Supported	Sync mode PPP, V.110 at rates up to 38400 bps; Network- and user-side ISDN; NFAS with backup D-channel; QSIG, Feature Group B, Feature Group D; DoVBS
Modem Protocols Supported	V.90 or V.92 standard supporting rates of 56000 to 28000 in 1333-bps increments; V.92 Modem on Hold and Quick Connect; V.44 Compression supporting increased throughput by more than 100 percent for Internet browsing; K56Flex at 56000 to 32000 in 2000-bps increments; ITU-T V34 Annex 12 at 33600 and 31200 bps; ITU-T V.34 at 28800, 26400, 24000, 21600, 19200, 16800, 14400, 12000, 9600, 7200, 4800, or 2400 bps; V.32bis 14400, 12000, 9600, 7200, 4800; V.32 9600, 4800; V.22bis 2400, 1200; V.21 300; Bell 103, 300; V.22 1200; V.23 1200/75; ITU-T V.42 (including Microcom Networking Protocol [MNP] 2-4 and Link Access Procedure for Modems [LAPM] error correction; ITU-T V.42bis (1000 nodes) and MNP 5 data compression; Async-mode PPP
Full Cisco IOS Software Support	IP Plus and Enterprise Plus feature sets including 3DES and Lawful Intercept images
Console and Auxiliary Ports	Asynchronous serial (RJ-45)
Chassis	Dimensions (H x W x D): 3.5 x 17.5 x 18.25 in.; Weight (fully loaded): 35 lbs. maximum (15.8 kg)
Memory Information	• Main SDRAM—2 slots, 512 MB default memory, 1 GB max memory • System Flash—1 slot, 128 MB default memory, 1 GB max memory

For More Information

For more information about the Cisco AS5400XM Universal Gateway, visit:
http://www.cisco.com/en/US/products/hw/iad/index.html.

Cisco AS5850 Universal Gateway

The Cisco AS5850 Universal Gateway is a high-density gateway with carrier-class attributes, offering high availability and exceptionally high capacity. It supports a wide range of IP-based, value-added services such as high-volume Internet access, corporate VPNs, long distance for Internet service providers (ISPs), international wholesale long distance, distributed prepaid calling, Cisco Signaling System 7 (SS7) interconnect and managed voice services including hosted IP telephony, managed IP private branch exchange (PBX), multiservice VPNs, and IP contact centers.

Ideal for Companies That Need These Features

Cisco AS5850 Universal Gateway	• Support for up to 2688 sessions of data, voice, or fax services using T1, E1, DS-3, or STM-1 trunk interfaces, with larger configurations supported for dial and time-division multiplexing (TDM) switching • Service provider or large enterprise installations • High port count behind one IP address • Highly available single system with multiple redundancy • Wholesale dial and voice, retail dial and voice, TDM grooming, or wireless applications

Key Features

- The Cisco AS5850 Universal Gateway offers hot-swappable, redundant power supplies and power feeds.
- This universal gateway provides redundant digital signal processors (DSPs) and route switch controllers (RSCs) a redundant blower for cooling, and Call Admission Control (CAC).
- Supports any codec at 100-percent capacity, simplifying network engineering.
- Supports Route Processor Redundancy Plus (RPR+) for high availability.
- This gateway provides thermal management and power management and redundant fans.
- This gateway offers the DSP Resource Recovery feature.
- Supports H.323v2, H.323v3, H.323v4, Session Initiation Protocol (SIP), and Media Gateway Control Protocol (MGCP) 1.0 and provides application-specific support, including support for AOL and Prodigy traffic.
- Offers WAN optimization, including routing filters, snapshot routine, and dial-on-demand routing (DDR).
- This gateway is European Telecommunications Standards Institute/Network Equipment Building Standards (ETSI/NEBS) Level 3 compliant.

- The gateway is interoperable with the Cisco Signaling System 7 (SS7) Interconnect for Voice Gateway (signaling gateway).
- This gateway provides Stratum-3 clock support and 802.1Q/1p VLAN/Inter-Switch Link (ISL) support.
- This gateway provides up to three chassis per rack (14RU chassis) and only 30A at 48V for 4 CT3 cards of high-complexity voice (11ma per voice channel, 12ma with route processor redundancy).

Specifications

Feature	Cisco AS5850
Slots	12 feature board slots; 2 ERSC slots
Processor	650 MHz Broadcom 1250 Dual Core
ERSC Switch Fabric	5 Gbps. Layer 3/4 switching
Memory	1 GB SDRAM with ECC per ERSC 128 MB SDRAM (with parity) per feature card
Trunk Cards	Single CT3 plus 216 DSP Channel feature card; 24 Ce1/CT1 feature card; Single port Channelized STM-1 feature card
Universal Port Card	324 Channel DSP-feature card
Egress Ports	Dual Gigabit load-balanced redundant Ethernet ports with GBIC interfaces for user traffic Dual 10/100 Mbps Ethernet port with RJ-45 connector for management traffic
LAN Protocols	IP, bridging, HSRP, 802.1Q
Service Support	Port Policy Management and SS7/C7
Routing Protocols	RIP, RIPv2, OSPF, IGRP, EIGRP, BGPv4, IS-IS, NHRP
Access Protocols	PPP, SLIP, TCP Clear
Bandwidth Optimization	Multilink PPP (MLPPP), TCP/IP header compression, Bandwidth Allocation Control Protocol (BACP), Bandwidth on demand, Nonfacility-associated signaling (NFAS), traffic shaping
Network Security	RADIUS or TACACS+, PAP or CHAP authentication, local user/password database, DNIS, CLID, call-type pre-authentication, Inbound/outbound traffic filtering (including IP), SNMPv2, SNMPv3
Virtual Private Networking	IP Security (IPSec) and policy enforcement (RADIUS or TACACS+) L2TP, Layer 2 Forwarding (L2F), and generic routing encapsulation (GRE) tunnels; Firewall security and intrusion detection; QoS features (committed access rate [CIR], Random Early Detection [RED], IP Precedence, policy-based routing)
Channelized T1	PRI, robbed-bit signaling; Loop Start; Immediate Start, and Wink Start Protocols
Channelized DS3	PRI, robbed-bit signaling; Loop Start; Immediate Start, and Wink Start Protocols
Channelized E1	CAS, PR1, E1 R2,SS7 IMT
Channelized STM-1	CAS, PR1, E1 R2,SS7 IMT
Voice Compression	G.711, G.723.1 (5.3K and 6.3K), G.726, G.729ab, G. Clear, GSM-FR,
DSP Voice Features	Echo cancellation, programmable up to 128 MB; Transparent transcoding between A-law and mu-law encoding; Voice activity detection, silence suppression, comfort noise generation; Fixed and adaptive jitter buffering; Call progress tone detection and generation—Dial tone, busy, ring-back, congestion, and re-order tones with local country variants; DTMF, Multifrequency (MF); Continuity Testing (COT)
Voice and Fax Signaling Protocols	H.323v2, H.323v4, SIP, MGCP 1.0, TGCP 1.0, Voice XML, Real-Time Streaming Protocol (RTSP), Extended Simple Mail Transfer Protocol (ESMTP); Fax out (transmission) Group 3, standards EIA 2388 Class 2 and EIA 592 Class 2.0 at modulations V.33, V.17, V.29, V.27ter, V.21; ITU-T T.30, T4; Fax detection; Fax and modem passthrough; Open Settlements Protocol (OSP), Media Recording Control Protocol (MRCP) to enable TTS and ASR Services
ISDN Protocols Supported	Sync mode PPP, V.110 at rates up to 38400 bps; Network- and user-side ISDN; NFAS with backup D-channel; QSIG, Feature Group B, Feature Group D; DoVBS

Modem Protocols Supported	V.90 or V.92 standard supporting rates of 56000 to 28000 in 1333-bps increments; V.92 Modem on Hold and Quick Connect; V.44 Compression supporting increased throughput by more than 100 percent for Internet browsing; K56Flex at 56000 to 32000 in 2000-bps increments; ITU-T V34 Annex 12 at 33600 and 31200 bps; ITU-T V.34 at 28800, 26400, 24000, 21600, 19200, 16800, 14400, 12000, 9600, 7200, 4800, or 2400 bps; V.32bis 14400, 12000, 9600, 7200, 4800; V.32 9600, 4800; V.22bis 2400, 1200; V.21 300; Bell 103, 300; V.22 1200; V.23 1200/75; ITU-T V.42 (including Microcom Networking Protocol [MNP] 2-4 and; Link Access Procedure for Modems [LAPM] error correction; ITU-T V.42bis (1000 nodes) and MNP 5 data compression
Wireless Protocol	V.110
Full Cisco IOS Software Support	IP Plus feature sets including 3DES and Lawful Intercept images
Console	Asynchronous serial (RJ-45)
Chassis	Dimensions (H x W x D): 24.5 x 17.5 x 12.4 in.; Weight (fully loaded): 220 lbs. (100 kg)
Memory Information	• ERSC SDRAM—1 GB default memory, 1 GB max memory • Feature Cards SDRAMS—128 MB default memory, 128 MB max memory • NOTE: Ships with all required memory

For More Information

For more information about the Cisco AS5850 Universal Gateway, visit: http://www.cisco.com/en/US/products/hw/iad/index.html.

Cisco Unified Border Element

The Cisco Unified Border Element (Cisco UBE) is an intelligent unified communications network element. Formerly known as the Cisco Multiservice IP-to-IP Gateway, the Cisco Unified Border Element, in addition to other Cisco IOS Software features, includes session border controller (SBC) functions that enable end-to-end IP-based transport of voice, video, and data between independent unified communications networks. SBCs are critical components for scaling unified communications networks from being "IP islands" within a single customer network to becoming an end-to-end IP community. One of the most significant uses of the Cisco Unified Border Element is to allow call-control elements such as Cisco Unified Communications Manager to connect to service providers for public-switched-telephone-network (PSTN) access offerings over Session Initiation Protocol (SIP) trunks. Today, the Cisco UBE is used as an IP-to-IP gateway by service provider, enterprise, and commercial customers to interconnect SIP and H.323 voice and video networks.

Ideal for Companies That Need These Features

Cisco Unified Border Element	• Session management—Counts and manages the number of sessions flowing through a router • Interworking—Interconnects different signaling methods and variants • Demarcation—Acts as a distinct demarcation point between the two networks • Security—Acts as a Layer 7 device that intelligently allows or disallows traffic between networks

Key Features

The Cisco Unified Border Element delivers the following features and benefits:

- Essential network border security features
- Privacy features for hiding internal network address structure from other administrative domains
- Layer 7 application layer gateway features
- Interworking features for interconnecting different voice-over-IP (VoIP) network types, such as H.323-to-SIP
- Dual tone multifrequency (DTMF) interworking
- Capacity control and improved call routing control using carrier-based routing
- Codec filtering by restricting codecs advertised on outbound call legs
- Billing and settlement features
- Software and hardware media-termination-point (MTP) functions for Cisco Unified Communications Manager (applies to Cisco 2800 and 3800 Series Integrated Services Routers only)
- Support for changing codecs during rotary dial-peer selection
- Simultaneous operation with TDM gateways on Cisco integrated service routers, permitting graceful migration from TDM to IP trunking
- Support for Lawful Intercept capabilities
- Support for Open Settlement Protocol
- Configurable Session Initiation Protocol (SIP) trunk profiles support
- Available in various licensing configurations to match customer capacity and price-point needs

Selected Part Numbers and Ordering Information

FL-CUBE-25(=)	Feature license applicable on any Cisco IOS Software platform for 25 simultaneous sessions
FL-INTVVSRV-261X(=)	Cisco 261x Integrated Voice Video License: IP-to-IP Gateway
FL-INTVVSRV-2811(=)	Cisco 2811 Integrated Voice Video License: IP-to-IP Gateway
FL-INTVVSRV-3845(=)	Cisco 3845 Integrated Voice Video License: IP-to-IP Gateway
FL-GK-IPIP7200(=)	Cisco 7200 IP-to-IP Gateway
FL-INTVVSRV-5X(=)	Cisco AS5350XM & AS5400XM Integrated Voice Video License: IP-to-IP Gateway

For More Information

For more information about Cisco Unified Border Element, visit:
http://www.cisco.com/en/US/products/sw/voicesw/ps5640/index.html.

Cisco Voice Gateways

Cisco voice gateways interface directly to private branch exchanges (PBXs) or public telephone networks to carry voice traffic across IP networks by converting IP calls to standard telephony calls, and conversely. They provide connectivity between packet telephony and traditional telephony such as public switched telephone network (PSTN), private branch exchanges (PBXs), fax machines, and other devices.

Cisco VG200 Series Gateways provide:

- High-density gateways for centralized deployments of analog phones, fax machines, modems, voicemail systems, and speakerphones
- Low-density gateways for distributed deployments of analog phones, fax machines, modems, and speakerphones
- A broad range of features for enterprise voice systems based on Cisco Unified Communications Manager or Cisco Unified Communications Manager Express

Cisco offers the Cisco VG202 and VG204 (low density), and the VG224 and VG248 (high density) dedicated analog voice gateways. The full line of Cisco access and integrated routers can also add analog and digital voice gateway functions through the use of network modules and voice interface cards.

Key Features

- Cisco VG202 and VG204 Analog Phone Gateways
  - 2 and 4 full-featured analog phone lines, respectively, for use as extensions to Cisco Unified Communications Manager or Cisco Unified Communications Manager Express systems in a desktop form factor with a fanless design.
  - Based on a Cisco IOS Software platform, the Cisco VG204 and Cisco VG202 offer identical functions and support similar network topologies as the Cisco VG224.
- Cisco VG224 Analog Phone Gateway
  - High-density, 24-port Cisco IOS Software gateway for analog phones, fax machines, modems, and speakerphones within an enterprise voice system based on Cisco Unified Communications Manager or Cisco Unified Communications Manager Express.
  - Integration with the IP-based phone system increases manageability, scalability, and cost-effectiveness.
  - Commercial businesses can use the Cisco VG224 in conjunction with Cisco Unified Communications Manager Express to effectively augment an integrated services router environment.
  - With Cisco Unified Communications Manager or Cisco Unified Communications Manager Express, the Cisco VG224 can provide supplementary analog services while using the Cisco IOS Software gateway for reliable fax and modem delivery.
- Cisco VG248 48-Port Analog Phone Gateway
  - 1-unit-high, rack-mountable device allowing 48 analog devices (phones, fax machines, and modems) to be used with Cisco Unified Communications Manager.
  - Organizations with large numbers of analog phones can deploy IP telephony while maintaining the investment in traditional handsets. The analog lines are full-featured, with caller ID, message waiting lights, and feature codes. The price per port is competitive with a traditional private branch exchange (PBX).
  - Supports the traditional voicemail Simple Message Desk Interface (SMDI) voicemail interface that allows the connection of a Cisco Unified Communications Manager network to a traditional voicemail system. It also allows the sharing of existing SMDI-based voicemail systems between the Cisco Unified Communications Manager and the traditional PBX.

Ideal for Companies That Need These Features

Cisco VG202 2-Port Analog Phone Gateway	· Skinny Client Control Protocol (SCCP), Media Gateway Control Protocol (MGCP), Session Initiation Protocol (SIP), or H.323 support for analog ports · Cost-effective, desktop form factor with a fanless design, FXS interfaces for Cisco Unified Communications Manager Express (CME) or Cisco Unified Communications Manager applications
Cisco VG224 24-Port Analog Phone Gateway	· SCCP, MGCP, SIP, or H.323 support for analog ports · Cost-effective, 1-rack unit (1RU), FXS interfaces for Cisco Unified CME or Cisco Unified Communications Manager applications · High concentration of analog voice ports for basic calls, with supplementary services such as transfer, hold, park, and pickup
Cisco VG248 48-Port Analog Phone Gateway	· SMDA termination; ability to allow the sharing of SMDI-based voicemail systems between the Cisco Unified Communications Manager and a traditional PBX

Selected Part Numbers and Ordering Information

VG202	Cisco VG202 analog phone gateway
VG204	Cisco VG204 analog phone gateway
VG224	Cisco VG224 analog phone gateway
VG248	Cisco VG248 analog phone gateway

For More Information

For more information about Cisco Voice Gateways, visit: http://www.cisco.com/go/voicegate.

Cisco MCS 7800 Series Media Convergence Servers

The Cisco Media Convergence Server product family provides robust hardware platforms for hosting Cisco Unified Communications software products. Technical support, service dispatch, and replacement of failed hardware are provided as part of a standard Cisco maintenance contract.

Cisco MCS 7800 Media Convergence Servers have different model designations based on their capacity and fault-tolerance features. A given Cisco MCS 7800 model will also have different generation designations (such as -I2) based on its vintage, specifications, and original manufacturer. An orderable part number for a Cisco MCS 7800 will convey its model, generation, original manufacturer, and whether the server is "bare-metal", shipped with a software media kit, or shipped with a factory preinstalled software image. For example, the Cisco MCS 7835-I2-IPC2/-CCX2/-CCE2/-ECS1 is model 7835, manufacturer IBM, generation 2, shipped as "bare-metal", vs. the Cisco MCS 7835I2-K9-CMC2/UCB1A, which is the same hardware but ships with a factory preinstalled image of Cisco Unified Communications Manager 7.1(2) for –CMC2 or Cisco Unity Connection 7.1 for UCB1A.

Cisco Unified Communications Manager also supports a "software-only" procurement model where servers may be purchased direct from supported server vendors such as IBM, provided the vendor, make, model, and parts list are exact matches for the corresponding Cisco MCS 7800 model or generation. These hardware specifications can be found at http://www.cisco.com/go/swonly.

Compatibility among Cisco MCS 7800 models or generations and versions of Cisco Unified Communications software should be verified prior to a new order, a hardware migration, or a software upgrade.

Many of these server models also have an optional tape drive (for backups) for purchase. Below are highlight Cisco Unified Communication Manager MCS model use cases. For Cisco Unified Contact Center, please consult the Contact Center Hardware and Software Specification as well as The Cisco Unified Contact Center Software Compatibility Matrix for what MCS models for use with Cisco Unified Contact Center Enterprise and Express solutions. For Cisco Unity Hardware configuration requirements please see http://www.cisco.com/en/US/prod/collateral/voicesw/ps6789/ps5745/ps2237/product_data_sheet0900aecd802132ef.html

For Cisco Unity Connection Hardware configuration requirements please see http://www.cisco.com/en/US/prod/collateral/voicesw/ps6789/ps5745/ps6509/data_sheet_c78-491743.html

Cisco MCS 7816

The Cisco MCS 7816 is a 1-rack-unit (1RU) high entry-level server platform with a single CPU, single disk drive, and a single non-hot-swap power supply. Typical deployments are 500 users or less per server.

Cisco MCS 7825

The Cisco MCS 7825 is a 1RU high-value server platform with a single CPU, two hard drives - configured as a Redundant Array of Independent Disks 1 (RAID1), and a single non-hot-swap power supply. Typical deployments are 1000 users or less per server.

Cisco MCS 7828

The Cisco MCS 7828 is a more powerful variant of the Cisco MCS 7825 for use with Cisco Unified Communications Manager Business Edition. Depending on generation, it has a more powerful CPU, more memory, and more hard disk space than the Cisco MCS 7825, but is otherwise identical. Typical deployments are 500 users or less per server.

Cisco MCS 7835

The Cisco MCS 7835 is a 2RU high, high-availability server platform with a single CPU, up to eight hot-swap hard disks, dependent on software product (usually only two), a RAID 1/0 controller, hot-swap redundant fans, and redundant hot-swap power supplies. Typical deployments are 2500 users or less per server.

Cisco MCS 7845

The Cisco MCS 7845 is a more powerful variant of the Cisco MCS 7835 used for higher-capacity deployments. It uses dual CPUs and up to eight hot-swap hard disks (though usually only four are supported by the Cisco software); otherwise it is identical to the Cisco MCS 7835. Typical deployments are for 5000 to 7500 users or less per server.

Ideal for Companies That Need These Features

Cisco MCS 7816	· Low-price solution ideal for small customer deployments · Rack form-factor
Cisco MCS 7825	· Small customer deployments where storage fault tolerance is important · Rack-form factor
Cisco MCS 7835	· Medium-sized customer deployments where storage fault tolerance is important · Power and fan redundancy · Rack-form factor
Cisco MCS 7845	· Large-sized customer deployments where storage fault tolerance is important and power and fan redundancy are important · Rack-form factor

Specifications

Specifications vary by Cisco MCS 7800 model, generation and manufacturer. Please see the datasheets at http://www.cisco.com/go/mcs and the parts lists at http://www.cisco.com/go/swonly for specifications.

Selected Part Numbers and Ordering Information

The part number to order depends on a number of factors, including but not limited to:

- The 7800 model, e.g. 7816, 7825, etc.
- The manufacturer and generation, e.g. –H3, -I3, etc.
- Whether the server will be shipped "bare-metal", or with a software media kit, or with a factory pre-installed software image
- With what software product the server will be used

Sample part numbers are provided below to illustrate part number syntax for the above factors. Check the documentation for your software product as well as the descriptions of the part numbers below for assistance with ordering the correct hardware.

MCS-7816-I4-CCE1 / MCS-7816- I4-CCX1 / MCS-7816- I4-IPC1	Cisco Media Convergence Server 7816- I4
MCS-7816-H4-CCE1 / MCS-7816- H4-CCX1 / MCS-7816- H4-IPC1	Cisco Media Convergence Server 7816- H4
MCS-7825- I4-IPC1 / MCS-7825- I4-ECS1 / MCS-7825- I4-CCX1	Cisco Media Convergence Server 7825- I4
MCS-7835-H2-IPC2 / MCS-7835-H2-ECS1 / MCS-7835-H2-CCX1	Cisco Media Convergence Server 7835-H2 V02
MCS-7835-I2-IPC2 / MCS-7835-I2-ECS1 / MCS-7835-I2-CCX1	Cisco Media Convergence Server 7835-I2 V02
MCS-7845-H2-IPC2 / MCS-7845-H2-ECS1 / MCS-7845-H2-ECS2 / MCS-7845-H2-CCX1/CCE2	Cisco Media Convergence Server 7845-H2 V02

MCS-7845-I2-IPC2 / MCS-7845-I2-ESC1 / MCS-7845-I2-ESC2 / MCS-7845-I2-CCX1 CCX1/CCE2	Cisco Media Convergence Server 7845-I2 V02

For More Information

For more information about the Cisco Media Convergence Server, visit: http://www.cisco.com/go/mcs and http://www.cisco.com/go/swonly.

Cisco ATA Analog Telephone Adapter

The Cisco ATA 186 Analog Telephone Adaptor brings analog telephones into the networked world. The Cisco ATA addresses the low-end product portfolio need by targeting the enterprise, business local services, small-office environment, and the emerging managed voice-services market. These cost-effective handset-to-Ethernet adaptors help enable analog devices, such as phones and fax machines, to support voice-over-IP (VoIP) services.

Cisco ATA adapters can be configured to use the standards-based VoIP protocols Session Initiation Protocol (SIP) and Skinny Client Control Protocol (SCCP).

Ideal for Companies That Need These Features

Cisco ATA Analog Telephone Adaptors

- Analog devices such as phones and fax machines enabled to support VoIP services by converting the analog signal into an IP signal
- Continuing use of existing analog phones with IP network

Key Features

- Autoprovisioning with Trivial File Transfer Protocol (TFTP) provisioning servers
- Automatic assignment of IP address, network route IP, and subnet mask through Dynamic Host Configuration Protocol (DHCP)
- Optional web configuration through built-in web server
- Optional touch-tone telephone keypad configuration with voice prompt
- Administration password to protect configuration and access
- Advanced preprocessing to optimize full-duplex voice compression
- High-performance line-echo cancellation to eliminate noise and echo
- Voice activity detection (VAD) and comfort noise generation (CNG) to save bandwidth by delivering voice, not silence
- Dynamic network monitoring to reduce jitter artifacts such as packet loss

Specifications

Feature	Cisco ATA 186	Cisco ATA 188
Telephone and network interfaces	2 RJ-11 FXS ports 1 RJ-45 interface for network connections	2 RJ-11 FXS ports 1 RJ-45 interface for network connections 1 RJ-45 "switch port" for connection to PC or another downstream Ethernet device Note: "Daisychaining" multiple ATAs together through the second RJ-45 port is not supported
Dimensions (H x W x D)	1.5 x 6.5 x 5.75 in. (3.8 x 16.5 x 14.6 cm)	1.5 x 6.5 x 5.75 in. (3.8 x 16.5 x 14.6 cm)
Weights	15 oz (425 gm)	15 oz (425 gm)
VoIP Protocols	SIP (RFC 2543); SCCP	SIP (RFC 2543); SCCP

Selected Part Numbers and Ordering Information

ATA186-I1-A	Cisco ATA 186 2-port adaptor, 600 ohm impedance[1]
ATA186-I2-A	Cisco ATA 186 2-port adaptor, complex impedance (270 ohm in series w/ 750 ohm and 150 nF in parallel)[1]

1. Some countries have telephone networks that list multiple impedance requirements., so closely approximate the impedance of the typical handsets used in the region when selecting the proper configuration to avoid poor echo cancellation performance.

For More Information

For more information about the Cisco ATA analog telephone adapters, visit: http://www.cisco.com/en/US/products/hw/gatecont/ps514/index.html.

Cisco Smart Business Communications System

The Cisco Smart Business Communications System (SBCS) combines voice, data, video, fax, and wireless into a single, purpose-built platform. This easy-to-deploy, easy-to-use solution will change the way customers communicate among their employees and with their customers, helping them become more efficient and more effective. With flexible support for up to 48 users and expansion capabilities for up to 64 users and up to five interconnected offices, the Cisco Smart Business Communications System can grow as customers grow.

Key Features

- Comprehensive connectivity—Cisco Unified Communications 500 Series for Small Business includes robust voice and call-processing capabilities, voice messaging, public-switched-telephone-network (PSTN) and Internet connectivity, integrated firewall, and an optional integrated wireless LAN (WLAN) access point. Up to five Cisco Unified 500 Series can be connected for interoffice calling and transfers, including phone connectivity for remote employees, teleworkers, and other mobile staff.
- Full portfolio of IP phones—The Cisco Smart Business Communications System supports the full portfolio of Cisco Unified IP Phones, including new value-priced Cisco Unified Communications 500 Series IP Phones and the Cisco SPA500 Series family of affordable IP phones for small business, designed to work specifically with the Cisco Unified Communications 500 Series. The phones offer a robust feature set and provide an intuitive, rich user experience with wideband audio to connect employees and offices, application support on the phone to enhance productivity, and encryption for enhanced security.
- Switching—Innovative Cisco Catalyst Express 520 Series switches with Power over Ethernet (PoE) support a variety of networking needs, with best-practice configuration through Cisco Smartports. Seamless integration support for the new Cisco ESW 500 Series Switches quickly and simply integrate with Cisco SBCS. The ESW switch portfolio includes Fast Ethernet, Gigabit Ethernet, and PoE models, are supported by a competitive warranty and services and provide a single high-performance and secure platform for any small business voice, video, data and wireless need.
- Routing—The Cisco Unified Communications 500 Series supports static routing and routing between VLANs and the built-in interfaces. Additionally, SBCS can be used with the Cisco 520 Series Secure Router which combines Internet access and wireless services to protect the business from threats and malware in a single easy-to-use device. The Cisco 520 Series Secure Router brings together multiple technologies to help lower costs, improve network security, and simplify network management.
- Application integration—Desktop applications provide capabilities such as visual access to voicemail, integration with e-mail, click to dial from any application, integrated faxing, and dynamic call recording. These applications include Cisco Unified CallConnector, Microsoft Dynamics CRM software, and additional third-party business-productivity applications. The following new integrated Smart Applications on the Cisco Unified Communications 500 Series platform bolster productivity: Cisco WebEx PhoneConnect, TimeCardView (with Cisco Unity Express) and Single Number Reach.
- Collaboration—The Cisco Smart Business Communications System supports impromptu video communications, instant messaging, and presence capabilities to accelerate business processes for competitive advantage. It provides support for 8-party impromptu voice conferencing and up to 32-party Meet Me conference bridge capabilities.
- Secure wireless—Cisco Mobility Express provides highly secure, integrated business-class wireless network capabilities for greater flexibility. It allows customers to offer wireless guest access to the Internet without providing access to the internal network.
- Simplified management—A GUI-based system configuration and management tool, Cisco Configuration Assistant, makes it easy to set up and administer the Cisco SBCS.
- Reduced complexity and improved reliability—Cisco SBCS reduces the complexity of the typical multivendor small business network and improves reliability through tighter integration of the critical components of an organization's network and phone system, all supported end to end by Cisco.
- Easy to own—The application is simple to order, with easy finance options available through Cisco Capital (includes Easy Lease); multilevel service options help ensure optimal return on investment (ROI).
- Flexible deployment options—The application works in customer premises, hosted, or managed service scenarios. It is available in desktop or 19-inch rack-mount form factors.

Specifications

Feature	Cisco Smart Business Communications System
Platform	Cisco Unified Communications 500 Series, Cisco Catalyst Express 520 Series Switches, Cisco 521 Wireless Express Access Point, Cisco 526 Wireless Express Mobility Controller, Cisco Unified IP Phones

Phones supported	521G, 521SG, 524G, 524SG, 7985G, 7975G, 7971G-GE, 7970G, 7965G, 7961G/GE, 7960G, 7945G, 7941G/GE, 7940G, 7912G, 7911G, 7905G, 7902G, 3911, wireless phone 7920, expansion module 7914, IP Conference station 7936, Cisco IP Communicator, Cisco Unified Video Advantage video telephony offering
IOS Images	12.4(11)XW9 (on Cisco UC500)

Selected Part Numbers and Ordering Information

Cisco Smart Business Communications System

Cisco Unified Communications 500 Series	
UC520-8U-4FXO-K9	8U Unified CME base, Cisco Unity Express, and phone FL w/4FXO, 1VIC
UC520-24U-8FXO-K9	24U Unified CME base, Cisco Unity Express, and phone FL w/8FXO, 1VIC
UC520-48U-12FXO-K9	48U Unified CME base, Cisco Unity Express, and phone FL w/12FXO, 1VIC
Cisco Unified Communications 500 Series Models with Optional Integrated WLAN Access Point	
UC520W-8U-4FXO-K9	8U Unified CME base, Cisco Unity Express, and phone FL w/4FXO, 1VIC, Wi-Fi
UC520W-16U-4FXO-K9	16U Unified CME base, Cisco Unity Express, and phone FL w/4FXO, 1VIC, Wi-Fi
Cisco 520 Series Secure Router	
SR520ADSL-K9=	Cisco Secure Router 520-ADSL features ADSL over basic telephone service WAN connectivity
SR520WADSL-K9=	Cisco Secure Router 520W-ADSL features ADSL over basic telephone service WAN connectivity and integrated wireless support
Cisco Catalyst Express 520 Series Switches	
WS-CE520-8PC-K9	8 10/100 access ports with PoE + 1 10/100/1000 or SFP ports
WS-CE520-24TT-K9	24 10/100 access ports + 2 10/100/1000 ports
Cisco ESW 500 Series Switches	
ESW-540-24P-K9	24 10/100 ports with PoE + 4 10/100/1000BASET (2 combo* SFP ports)
ESW-520-48P-K9	48 10/100 ports with PoE + 2 10/100/1000BASET and SFP ports
ESW-520-24P-K9	24-port 10/100/1000 with PoE and 4 combo* SFP ports
*Combo SFP slots include one 10/100/1000BASET Ethernet port and 1 SFP Gigabit Ethernet slot for fiber, 1 port active at a time	

Cisco Mobility Express Products

Cisco 521G Wireless Express Access Point	
AIR-AP521G-A-K9	Standalone mode upgradeable to controller mode; 802.11b/g; integrated antennas; FCC regulatory domain
AIR-LAP521G-A-K9	Controller mode; 802.11b/g; integrated antennas; FCC regulatory domain Requires WLC526

License-based upgrades are available for the Unified Communications 500 Series models. This allows upgrades from the 8-user, desktop form factor version to the 16-user version. In addition, the 24-user system, available in the 19-inch rack mount form factor, can be upgraded to a 32 or 48-user system and a 32 user system can be upgraded to 48 users. A software license upgrade from 48 to 64 users is also available. Upgrades to 64 users must be from a 48 user system; upgrades to 64 users from a 24 or 32 user system are not available.

For customers that want to move from the 8/16-user version to the 24/32/48-user version, a hardware replacement is required. The Cisco to Cisco Technology Migration Program (TMP) will provide a 10 percent credit of the original list price toward the larger system. More information on the TMP can be found at http://www.cisco.com/go/tradein.

For More Information

For more information about the Cisco Smart Business Communications System, visit: http://www.cisco.com/go/sbcs.

Cisco Unified Communications Manager

Cisco Unified Communications Manager is the powerful call-processing component of the Cisco Unified Communications Solution. It is a scalable, distributable, and highly available enterprise IP telephony call-processing solution that focuses on lowering the total cost of ownership for customers and improving the user experience of end users and system administrators. Major highlights include:

- Local route groups and transformation patterns greatly reduce the configuration effort to create dial plans.
- Intelligent bridge selection saves customers money by optimizing the use of video bridge resources.
- Trusted relay points enable trusted quality of service and Call Admission Control, as well as trusted VLAN traversal for unified communications software clients.

- Early offer support with G.729 on Session Initiation Protocol (SIP) trunks provides the savings of low-bandwidth codecs.

Key Features

- Cisco Unified Communications Manager is installed on Cisco 7800 Series Media Convergence Server platforms and selected third-party servers.
- Multiple Cisco Unified Communications Manager servers can be clustered and managed as a single entity. The application offers scalability from 1 to 30,000 IP phones per cluster, with load-balancing and call-processing service redundancy. Interlinking allows system capacity to reach 1 million users in a system of more than 100 sites. The solution aggregates the power of multiple, distributed installations, enhancing the scalability and accessibility of the servers to phones, gateways, and applications, and triple call-processing server redundancy improves overall system availability.
- Call Admission Control (CAC) helps ensure that voice quality of service (QoS) is maintained across constricted WAN links, and automatically diverts calls to alternate public-switched-telephone-network (PSTN) routes when WAN bandwidth is not available.
- Devices can automatically update location information as they move from location to location to improve CAC and emergency service performance.
- This solution effectively supports IP phone activities; Cisco Unified Communications Manager Assistant has been ported to an Extensible Markup Language (XML) service that can be run on the phone, allowing assistants that handle executive and manager phones to have increased features without having to rely on a PC to provide the user interface.
- Cisco Unified Communications Manager integrates with a Lightweight Directory Access Protocol (LDAP) directory such as Active Directory to provide required security features.
- Cisco Unified Communications Manager provides improved call routing to remote phones connected over a WAN. It allows alternate routing when the WAN is out of bandwidth or out of service. It provides routing to the originally called phone number through the PSTN or can call an alternate phone such as a mobile phone during a WAN failure or an out-of-bandwidth situation.
- Access through a full GUI and a command-line interface facilitates diagnostics. The solution supports all system management activities such as disk-space monitoring, system monitoring, and upgrades, which are either automated or controlled. The solution supports basic systems management features such as starting or stopping services and rebooting the appliance.
- The solution is preloaded with Cisco Security Agent.
- An expanded Session Initiation Protocol (SIP) trunk interface conforms to RFC 3261, allowing support of video calls over the SIP trunk. Cisco Unified Communications Manager supports line-side devices, including IETF RFC 3261-compliant devices available from Cisco and other manufacturers.
- The Resource Reservation Protocol (RSVP) agent on a Cisco router extends CAC capability beyond a hub-and-spoke topology within a cluster.
- Simple Network Management Protocol (SNMP) support allows managers to set and report traps on conditions that could affect service and send them to the remote-monitoring systems.

Specifications

Feature	Cisco Unified Communications Manager[1]
Pre-installed Software	Cisco Unified Communications Manager, configuration database, administrative software, CDR Analysis and Reporting Tool, Bulk Administration Tool (BAT), Real-Time Monitoring Tool (RTMT), Cisco Conference Bridge, Locale Installer, JTAPI, Telephony Service Provider, Cisco Unified Communications Manager Assistant, Cisco Unified Mobility, Cisco Unified IP Phone Address Book Synchronizer, Cisco Dialed Number Analyzer
Platforms	Media Convergence Server (MCS); Selected third-party servers
New and Enhanced User Features	• For easier administration, saving you time and resources—Calling party normalization; E.164 with "+" dialing; local route groups and transformation; trusted relay point; intelligent bridge selection, IP phone migration tool, Cisco Data Migration Assistant enhancements. • Mobility features—Dial via Office; directed call park; reverse callback; simultaneous ring time-of-day access list • Greater interoperability with partners—Click to conference with IBM Sametime; simultaneous ring Uniform Resource Identifier (URI) dialing with Microsoft OCS; T.38 Fax interoperability with Microsoft Exchange; Active Directory 2008, Q.SIG variant provisioning, IPv6 support, Open LDAP support, H.235 video support • New telephony features—Directed call pick up; do not disturb — call reject; extension mobility feature safe; Phone services provisioning, abbreviated dialing enhancements, drop any conference party from CTI-enabled endpoint • Additional localization—Estonian; Latvian; Lithuanian • New SIP support—Single button barge; join across lines; busy-lamp-field (BLF) alert; BLF pickup; conference chaining; do not disturb — call reject; Cisco Unified IP Phone 7931G

New and Enhanced System Capabilities	• Abbreviated dialing enhancements • Alternate automatic routing (AAR); Attenuation and gain adjustment per device (phone and gateway) • Automated bandwidth selection: auto route selection (ARS) • Codec support for automated bandwidth selection: G.711 (mu-law and a-law), G.722, G.722.1, G.723.1, G.728, G.729A/B, GSM-EFR, GSM-FR, and wideband audio (proprietary 16-bit resolution; 16-kHz sampled audio); Digit analysis and call treatment (digit string insertion, deletion, stripping, dial access codes, and digit string translation); Distributed call processing—Deployment of devices and applications across an IP network; Virtual clusters of up to eight Cisco Unified Communications Manager servers for scalability, redundancy, and load balancing; Maximum of 7500 IP phones per Cisco Unified Communications Manager server and 30,000 per server cluster (configuration-dependent); Maximum of 100,000 busy-hour call completions (BHCCs) per Cisco Unified Communications Manager server and 250,000 per server cluster (configuration-dependent); Intercluster scalability to more than 100 sites or clusters through H.323 gatekeeper; Intracluster feature and management transparency • Fax over IP—G.711 pass-through and Cisco Fax Relay; Forced authorization codes and client matter codes (account codes); Hotline and private line automated ringdown (PLAR); Hunt groups—Broadcast, circular, longest idle, and linear; Language support for client-user interfaces (languages specified separately) • Ipv6 support—Dual stack deployment of IPv4 and IPv6 is supported, enabling graceful migrations from IPv4 to IPv6 networks • Multiple remote Cisco Unified Communications Manager platform administration and debug utilities—Prepackaged alerts, monitor views, and historical reports with RTMT; Real-time and historical application performance monitoring through operating system tools and SNMP; Monitored data collection service; Remote terminal service for off-net system monitoring and alerting; Real-time event monitoring and presentation to common syslog; Trace setting and collection utility; Browse to onboard device statistics; Clusterwide trace setting tool; Trace collection tool; Multisite (cross-WAN) capability with intersite CAC • Off-premises extension (OPX); Outbound call blocking; Out-of-band dual tone multifrequency (DTMF) signaling over IP; PSTN failover on route nonavailability—AAR; Call preservation—redundancy and automated failover—on call-processing failure; Station-to-station • Q.SIG variant provisioning, to configure either ISO or ECMA variants on a gateway or trunk basis to a single Cisco Unified Communications Manager cluster. • Security—Device authentication; New model phones have an embedded X.509v3 certificate; a certificate authority proxy function (CAPF) is used to install locally significant certificate in the phones. • Cisco Unified SRST • Silence suppression and voice activity detection; Simplified North American Numbering Plan (NANP) and non-NANP support; T.38 fax support (H.323 and SIP); Time-of-day, day-of-week, and day-of-year routing and restrictions • SIP line and trunk enhancements; directed call pickup, join across lines, single button barge, and others. Added security with support of secure RTP over SIP trunk. • Toll restriction—Dial-plan partition; Toll-fraud prevention—Prevent trunk-to-trunk transfer; Drop conference call when originator hangs up; Require forced authorization codes • Unified device and system configuration; Unified dial plan • Video codecs: H.261, H.263, H.264, and Cisco Wideband Video Codec (Cisco Unified Video Advantage) • Video Telephony (SCCP, H.323, and SIP)
Sample Subset of Administrative Features	• Conceals seconds calculation • Mean Opinion Score (MOS) calculation using K-Factor • Support for password aging, complex password requirements, one-time passwords, with LDAP directory • Voice quality statistics on a call-by-call basis • Application discovery and registration to SNMP manager • Intelligent Bridge Selection • Automated alternate routing groups, local route groups, and transformation patterns • AXL SOAP API with performance and real-time information, bulk administration

1. Additional RAM may be required in Media Convergence Servers to support existing and enhanced services in Cisco Unified Communications Manager.

Selected Part Numbers and Ordering Information

UNIFIED-CM-7.0	Cisco Unified CM 7.0 Top Level Part Number

For More Information

For more information about Cisco Unified Communications Manager, visit: http://www.cisco.com/go/callmgr.

Cisco Unified Communications Manager Assistant

Included with Cisco Unified Communications Manager, Cisco Unified Communications Manager Assistant provides the call-routing and call-management capabilities required in a manager or administrative assistant business environment while giving users a choice of phone devices that better fit their needs. By combining a PC-based console application with various softkeys and display panes on Cisco Unified IP Phones, it can present users job-specific tools, such as directories with Click-to-Dial and drag-and-drop functions, to more efficiently manage calls.

Cisco Unified Communications Manager Assistant is configured in either proxy-line mode or shared-line mode. In proxy-line mode, managers and assistants have different directory numbers or lines on their phones, but calls to managers are usually diverted to the assistant's line based on customizable dynamic filters. In shared-line mode, both managers and assistants share the same directory number, but assistants can handle calls without disturbing managers. Either mode can be used in conjunction with the PC-based console application or a new Extensible Markup Language (XML)-based phone service that does not require a PC.

Ideal for Companies That Need These Features

Cisco Unified Communications Manager Assistant	• Administrative assistants who need an efficient way to monitor and manage calls for multiple managers • Managers who regularly have their calls answered by an assistant

For More Information

For more information about Cisco CMA, visit: http://www.cisco.com/go/ipma.

Cisco Unified Communications Manager Business Edition

Cisco Unified Communications Manager Business Edition (CUCMBE) is designed for medium-sized businesses with up to 500 employees and up to 20 sites (19 remote sites). The Cisco Unified Communications Manager Business Edition integrates the benefits of voice, video, mobility, and messaging on a single platform. Previously, organizations needed one hardware server for each application. Consolidating applications on a single server makes the Cisco Unified Communications Manager Business Edition a cost-effective solution by eliminating the need to have multiple hardware servers to run each application. It also dramatically simplifies the installation, support, upgrade, and ongoing management of the system, thereby reducing the total cost of ownership (TCO).

Key Features

The Cisco Unified Communications Manager Business Edition inherits nearly all of the core features and functions of the Cisco Unified Communications Manager and Cisco Unity Connection products. Some of the core capabilities are summarized here.

- Call control—In addition to standard telephony features such as call coverage, call transfer, call waiting, hold, conference, park, and pickup, Cisco Unified Communications Manager Business Edition delivers a powerful set of telephony features for medium-sized businesses -- for instance, intercom with whisper page, do not disturb, hold reversion, immediate divert to voicemail, and hunt groups.
- Lightweight Directory Access Protocol (LDAP) synchronization and authentication
- Support for up to 20 Survivable Remote Site Telephony (SRST) sites using a centralized call-processing model
- Session Initiation Protocol (SIP) support
- Call Admission Control (CAC)
- Powerful Cisco Unified Mobility capabilities
- Cisco Unity Connection voice and integrated messaging
- Conferencing and calendaring integration
- Personal Web administration

Specifications

Feature	Cisco Unified Communications Manager Business Edition
Platform	The Cisco Unified Communications Manager Business Edition software suite is supported on the Cisco MCS 7828 Unified Communications Manager Business Edition Appliance, a member of the Cisco media convergence server portfolio.
Maximum total users	500
Mailboxes and voicemail ports	500 mailboxes and 24 voicemail ports
Number of remote sites	20 (centralized call processing, with Cisco Unified Survivable Remote Site Telephony [SRST] for redundancy)

Telephony and voicemail feature limitations	Cisco Unified Communications Manager Business Edition supports all the standard telephony features of Cisco Unified Communications Manager and voice-messaging features of Cisco Unity Connection except the following: • Call processing and voicemail redundancy • Distributed call processing—Cisco Unified Communications Manager Business Edition is supported only in the centralized call-processing model with Cisco Unified SRST.

User and Administrator Features

For a summary of user and administrator features, please refer to the Cisco Unified Communications Manager 7.0 and Cisco Unity Connection 7.0 data sheets.

Supports 14 core languages for user locales, the voicemail telephone user interface, and the GUI.

In addition to the core languages, Cisco Unified Communications Manager supports an additional 13 user localizations.

Selected Part Numbers and Ordering Information

Cisco Unified Communications Manager Business Edition can be ordered in a couple of different ways, either independently (with traditional licenses) or as part of a workspace bundle (with workspace licenses).

Both Cisco Unified Communications Manager Business Edition licenses require purchasing a starter bundle. The starter bundles include all the unified communications server and client software for the applications included under the licenses, the Cisco MCS 7828 server hardware for deploying Cisco Unified Communications Manager Business Edition, and licenses for the first 50 users. To deploy Cisco Unified Presence, customers need to purchase a separate adjunct server.

MCS7828I4-K9-WL	CUCMBE, 7828-I4 appliance, Workspace License 50 Users
MCS7828H3-K9-WL	CUCMBE, 7828-H3 appliance, Workspace License 50 Users

For More Information

For more information about the Cisco Unified Communications Manager Business Edition, visit: http://www.cisco.com/go/cmbe.

Cisco Unified Communications Manager Express

Cisco Unified Communications Manager Express provides call processing for Cisco Unified IP phones for small-office or branch-office environments. It enables the large portfolio of Cisco integrated services routers to deliver unified communications features that are commonly needed by business users to meet the voice and video communications requirements of the small or medium-sized office. Cisco Unified Communications Manager Express allows the deployment of a cost-effective, highly reliable communications system using a single device using Cisco IOS Software.

Key Features

- Low cost —This full-featured call processing solution is integrated into Cisco Integrated Services Routers and Cisco Multi-service Access Routers that deliver a small footprint and are simple to deploy, administer, and maintain
- Comprehensive feature set—Innovative key system and small private branch exchange (PBX) capabilities available within feature-rich Cisco IOS software
- Business process transformation—Integration with existing business process applications, such as Customer Relationship Management (CRM), delivered in combination with Cisco Unified CallConnector applications
- Increased employee productivity—Users have call control, location, and status of other users with Cisco Unified CallConnector for Microsoft Windows, a presence-based Windows application
- User-specified call handling—Users can take advantage of single number reach by extending incoming business calls to mobile or home phones based on rules they specify with Cisco Unified CallConnector Mobility
- Easy installation and changes—An intuitive management interface makes moves, adds and changes easy
- Industry-leading investment protection—The solution designed to support up to 250 users can interoperate with Cisco Unified Communications Manager, and enables planned migration strategies in support of future growth requirements

Specifications

Feature	Cisco Unified Communications Manager Express
Platform	Cisco 1861, 2801, 2811, 2821, 2851, 3250, 3270, 3825, and 3845 Integrated Services Routers. Cisco Unified 500 Series for Small Business as part of Cisco Smart Business Communications System
Phones Supported	All Cisco Unified IP Phones 7900 Series and Cisco Unified SIP Phones 3900 Series

IOS Images	Version 3.3 supported with IOS 12.4 mainline; Version 3.4 with IOS 12.4(4)T; Version 4.0 with IOS 12.4(9)T, Version 4.1 with 12.4(15)T; Version 7.0 with 12.4(20)T. Version 7.1 with 12.4(24)T. Version 4.0 is the recommended release for most customers.

Selected Part Numbers and Ordering Information

Cisco Integrated Service Routers Unified Communications Bundles that include the Cisco Router, Cisco Unified Communications Manager Express Feature License, Cisco Unity Express hardware and licensing, Cisco Unified IP Phone licensing and Cisco Unified CallConnector for Microsoft Windows licensing.

C3845-35UC-VSEC/K9	UC plus Security with Cisco Unity Express—Cisco 3800 Series Integrated Services Routers: Cisco 3845 base router, 128 MB flash, 512 MB DRAM, DSP-64, NME-CUE, CCME FL for 35 users, CUE FL for 35 users, 35 phone device licenses, Cisco IOS Advanced IP Services, 10 UCC desktop client licenses
C2851-35UC-VSEC/K9	UC plus Security with Cisco Unity Express—Cisco 2800 Series Integrated Services Routers: Cisco 2851 base router, 128 MB flash, 256 MB DRAM, DSP-48, NME-CUE, CCME FL for 35 users, CUE FL for 35 users, 35 phone device licenses, Cisco IOS Advanced IP Services, 10 UCC desktop client licenses
C2801-10UC-VSEC/K9	UC plus Security with Cisco Unity Express—Cisco 2800 Series Integrated Services Routers: Cisco 2801 base router, 128 MB flash, 256 MB DRAM, DSP-32, AIM-CUE, CCME FL for 10 users, CUE FL for 10 users, 10 phone device licenses, Cisco IOS Advanced IP Services, 2 UCC desktop client licenses
C3845-35UC/K9	UC with Cisco Unity Express—Cisco 3800 Series Integrated Services Routers: Cisco 3845 base router, 128 MB flash, 512 MB DRAM, DSP-64, NME-CUE, CCME FL for 35 users, CUE FL for 35 users, 35 phone device licenses, Cisco IOS SP Services, 10 UCC desktop client licenses
C2851-35UC/K9	UC with Cisco Unity Express—Cisco 2800 Series Integrated Services Routers: Cisco 2851 base router, 128 MB flash, 256 MB DRAM, DSP-48, NME-CUE, CCME FL for 35 users, CUE FL for 35 users, 35 phone device licenses, Cisco IOS SP Services, 10 UCC desktop client licenses
C2801-10UC/K9	UC with Cisco Unity Express—Cisco 2800 Series Integrated Services Routers: Cisco 2801 base router, 128 MB Flash, 256 MB DRAM, DSP-32, AIM-CUE, CCME FL for 10 users, CUE FL for 10 users, 10 phone device licenses, Cisco IOS SP Services 2 UCC desktop client licenses
C1861-UC-4FXO-K9	UC with Cisco Unity Express—Cisco 1800 Series Integrated Services Routers: Cisco 1861, 128 MB flash, 256 MB DRAM, DSP-32, 4 FXS, 4 FXO/2BRI, 8 PoE, AIM-CUE, CCME FL for 8 users, CUE license for 8 users, 10 phone device licenses, Cisco IOS SP Services, 2 UCC desktop client licenses

For More Information

For more information about the Cisco Unified Communications Manager Express, visit: http://www.cisco.com/go/ccme.

Cisco Unified Survivable Remote Site Telephony

Cisco Unified Survivable Remote Site Telephony (SRST) provides critical backup telephony functions at remote branch offices when connectivity to the centrally located Cisco Unified Communications Manager fails (that is, the WAN link is interrupted). During WAN outage the Cisco Unified SRST-enabled router provides robust telephony services (including off-net calls to 911). This product is ideal for enterprise organizations looking to cost-effectively deploy IP telephony in their branch-office locations. Cisco Unified SRST is available on the Cisco 880 Series, 1861,and 2800 and 3800 Series Integrated Services Routers and the Cisco Catalyst 6500 Series Switches using the Cisco Communications Media Module (CMM).

Key Features

- Business resiliency is achieved through redundant, localized call processing with intelligent and automatic failover configuration—no manual IT or telecom intervention is required.
- This single appliance device is ideal for routing, security, public switched telephone network (PSTN) gateway services, and call control during WAN outages.
- Cisco Unified SRST supports all Cisco Unified IP Phones, supporting 8 to 730 phones per platform.
- All common PSTN interfaces and protocols are supported, in addition to support for both internal and external calling during failover with calls maintained during failover and fall-back.
- Voicemail is supported during WAN outages with local Cisco Unity Express or centralized Cisco Unity unified messaging through the PSTN.

Selected Part Numbers and Ordering Information

SRST Platform Density and Feature License*			
Part Number	**Part Number (spare)**	**Platform**	**Number of Phones Supported**

Included	Included	Cisco 880	Up to 4
Included	Included	Cisco 1861	Up to 15
FL-SRST-25	FL-SRST-25=	Cisco 2801	Up to 25 phones
FL-SRST-50	FL-SRST-50=	Cisco 2821	Up to 50 phones
FL-SRST-100	FL-SRST-100=	Cisco 2851	Up to 100 phones
FL-SRST-250	FL-SRST-250=	Cisco 3845	Up to 250 phones
***	***	Cisco 3845	Up to 730 phones
FL-SRST-480	FL-SRST-480=	Cisco Catalyst 6500 Communication Media Module	Up to 336 phones**

* The number of phones supported by SRST have been changed to multiples of 5 starting with Cisco IOS Software Release 12.4(15)T3.
** The Cisco Catalyst 6500 Series CMM supports Cisco Unified SRST 4.0 with Cisco IOS Software Release 12.4, and Cisco Unified SRST 2.1 with Cisco IOS Software Release 12.2(13)ZC.
*** There are no corresponding part numbers, but you can purchase multiple parts to reach the desired phone count.

For More Information

For more information about Cisco Unified SRST, visit: http://www.cisco.com/go/srst.

Cisco Unified IP Phones 3900 Series

The Cisco Unified SIP Phone 3911 is an affordable, entry-level single-line SIP-based endpoint that is designed for environments with low communication needs such as lobbies, hallways, cafeterias, classrooms and can be used within retail and manufacturing environments.

The Cisco Unified SIP Phone 3911 can grow with the organization whether it is a small, mid-sized or large enterprise business. Easy to administer and maintain, the endpoint includes support for speakerphone, dedicated keys for common telephony features and LED's for status of commonly used functions.

Key Features

- Half-duplex speakerphone and microphone
- Fixed keys for one-touch access to redial, transfer, conference, hold, line, select, mute, speakerphone and voicemail keys
- LED's to indicate status of commonly used features
- 2 line x 24 character monochrome display
- Two menu select keys and two-way rocker for scrolling control

Specifications

Feature	Cisco Unified IP Phones 3900 Series
Integral Switch	No
Display	144x32 monochrome
Programmable (line) keys	0
Programmable (soft) keys	0
Speakerphone	Half-duplex
Headset port	No
Wideband audio	No
iLBC support	No
"5-way" navigation cluster	No
XML application	No
Extension mobility	No
Video Advantage Camera support	No
Signaling protocol	SIP

Selected Part Numbers and Ordering Information

CP-3911	Cisco Unified SIP Phone 3911

For More Information

For more information on the Cisco Unified SIP Phone 3900 Series, go to http://www.cisco.com/en/US/products/ps10326/index.html.

Cisco Unified IP Phones 6900 Series

The Cisco Unified IP Phone 6900 Series is a complementary addition to the Cisco Unified IP Phone portfolio for enterprises that includes the Cisco Unified IP Phone 3900 and IP Phone 7900 Series.

The Cisco Unified IP Phone 6900 Series introduces a simple and earth-friendly ergonomic design, delivering an enhanced user experience for customers seeking cost-effective, robust voice communication services with traditional telephony-like user experience. This phone is an ideal solution for enterprise campus, enterprise branch office, satellite office, remote teleworking, and contact center environments.

The Cisco Unified IP Phone 6900 Series also brings a more responsible design with earth-friendly enhancements to reduce power consumption and increase energy savings for customers. These phones take advantage of recyclable and reground plastics and offer a deep-sleep mode option, which reduces power consumption in off-work hours and offers 50-percent power savings versus normal daytime use.

Key Features

- Backlit, antiglare, pixel-based graphical monochrome displays offer readability and scrollable access to calling features and text-based XML applications.
- Tri-color illuminated line and feature keys provide quick call status indication.
- Four dynamic soft-label keys and a scroll toggle-bar present calling and navigation options.
- You have a choice of two colors (charcoal and arctic white) and handset styles (slimline and standard).
- The Cisco Unified IP Phone 6900 Series phones have fixed keys for common telephony functions such as mute, hold, conference, transfer, messaging, and directories.
- The keys are rounded and ergonomic.
- You can co-locate your PC within your workspace with an integrated 10/100 Ethernet switch on the phone.
- The phones have a full-duplex speakerphone and integrated headset ports.
- The phones offer seven user-adjustable ringtones.
- A deep-sleep power option provides up to 50-percent savings in power consumption during off-work hours.
- The Cisco Unified IP Phone 6900 Series phones support Cisco Skinny Client Control Protocol (SCCP).
- The phones support G.711a, G.711, G.729a, G.729b, and G.729ab audio-compression codecs.
- Software upgrade support is provided through a Trivial File Transfer Protocol (TFTP) server.

Specifications

Feature	6921	6941	6961
Integral Switch	10/100	10/100	10/100
Display	396 x 81 pixel backlit anti-glare monochrome	396 x 162 pixel backlit anti-glare monochrome	396 x 81 pixel backlit anti-glare monochrome
Programmable (line) keys	2	4	12
Programmable (soft) keys	4	4	4
Speakerphone	Full-duplex	Full-duplex	Full-duplex
Headset port	Yes	Yes	Yes
Wideband audio	No	No	No
iLBC support	No	No	No
2-way Rocker with Select Key	Yes	Yes	Yes
XML application	Yes - limited	Yes - limited	Yes - limited
MIDlet-enabled applications	No	No	No
Extension mobility	Yes	Yes	Yes

Signaling protocol	SCCP	SCCP	SCCP

Selected Part Numbers and Ordering Information

CP-6921-C-K9=	Cisco Unified IP Phone 6921, Charcoal, Standard Handset
CP-6921-WL-K9=	Cisco Unified IP Phone 6921, Arctic White, Slimline Handset
CP-6941-CL-K9=	Cisco Unified IP Phone 6941, Charcoal, Slimline Handset
CP-6941-W-K9=	Cisco Unified IP Phone 6941, Arctic White, Standard Handset
CP-6961-C-K9=	Cisco Unified IP Phone 6961, Charcoal, Standard Handset
CP-6961-W-K9=	Cisco Unified IP Phone 6961, Arctic White, Standard Handset

For More Information

For more information about the Cisco Unified IP Phone 6900 Series portfolio, visit: http://www.cisco.com/go/ipphones/6900.

Cisco Unified IP Phone 7900 Series

With Cisco Unified IP Phones, organizations can take full advantage of converged voice and data networks while retaining the convenience and user friendliness they expect from a business phone. These endpoints help improve productivity by meeting the needs of different users throughout organizations. The Cisco Unified IP Phone 7975G, 7965G, 7962G and 7960G models are designed to address the communication needs for more active communication requirements. The Cisco Unified IP Phone 7945G, 7942G and 7940G models address the communication needs for moderate levels of communication requirements. The Cisco Unified IP Phone 7911G and 7906G models address the communication needs for low to medium communications environments. Almost all models in the portfolio support multiple call appearance per line. This empowers users to have multiple call sessions, navigated through the use of the rocker or navigation cluster on a single line appearance on the 7900 Series phone.

Key Features

- Touchscreen support on Cisco Unified IP Phone 7975G
- Dynamic softkeys for call features and functions
- Support for endpoint applications including XML, MIDlets, Cisco Unified Communications Widgets and Cisco Unified Application Environment on selected models
- Automatic phone discovery, VLAN configuration, and registration
- Quality of service (QoS) through support of 802.1Q/p, in addition to configurable Differentiated Services (DiffServ) and type of service (ToS)
- Voice Activity Detection (VAD), silence suppression, comfort-noise generation, and error concealment
- G.711a, G.711u, and G.729ab audio-compression codec support; selected models also support the G.722 wideband codec
- Software upgrade support through a Trivial File Transfer Protocol (TFTP) server
- Integrated inline power support, which allows the phone to receive power over the LAN

Specifications

Feature	7906G	7911G	7931G	Conf. Station 7936G	Conf. Station 7937G
Integral Switch	No	10/100	10/100	No	No
Display	192x64 monochrome	192x64 monochrome	192x64 graphical, monochrome, backlit	Pixel-based	Pixel-based
Programmable (line) keys	0	0	24	0	0
Programmable (soft) keys	4	4	4	3	4
Speakerphone	Yes (listen only)	Yes (listen only)	Yes	Yes	Yes
Headset port	No	No	Yes	No	No

Wideband audio	Limited	Limited	Limited	No	Yes
iLBC support	Yes	Yes	Yes	No	No
“5-way” navigation cluster	No	No	No	No	No
XML application	Yes	Yes	Yes	No	Yes
Extension mobility	Yes	Yes	Yes	No	Yes
Video Advantage Camera support	No	Yes	Yes	No	No
Signaling protocol	SCCP/SIP	SCCP/SIP	SCCP/SIP	SCCP	SCCP
Feature	**7940G**	**7942G**	**7945G**	**7960G**	**7962G**
Integral Switch	10/100	10/100	10/100/1000	10/100	10/100
Display	Monochrome 5”	4-bit grayscale, 5”	Digital, 16-bit graphical backlit TFT Color, 5”	Mono-chrome, 5”	4-bit grayscale, 5”
Programmable (line) keys	0	2-lighted	2-lighted	0	6-lighted
Programmable (soft) keys	4	4	4	4	4
Speakerphone	Yes	Yes	Yes	Yes	Yes
Headset port	Yes	Yes, wideband support	Yes, wideband support	Yes	Yes, wideband support
Wideband audio	No	Yes	Yes	No	Yes
iLBC support	No	Yes	Yes	No	Yes
“5-way” navigation cluster	No	No	Yes	No	No
XML application	Yes	Yes	Yes	Yes	Yes
Extension mobility	Yes	Yes	Yes	Yes	Yes
Video Advantage Camera support	Yes	Yes	Yes	Yes	Yes
Signaling protocol	SCCP	SCCP/SIP	SCCP/SIP	SCCP	SCCP/SIP
Feature	**7965G**	**7975G**	**7985G**	**7921G/7925G**	
Integral Switch	10/100/1000	10/100/1000	10/100	N/A	
Display	Digital, 16-bit graphical backlit TFT Color, 5”	Digital, 16-bit graphical backlit TFT Color, 5.6”	8.4” color for 2-way video	Digital, 16-bit graphical backlit TFT Color, 2”	
Programmable (line) keys	6-lighted	8-lighted	1	N/A	
Programmable (soft) keys	4	5	5	2	
Speakerphone	Yes	Yes	Yes	Yes	
Headset port	Yes, wideband support	Yes, wideband support	Yes	Yes	

Wideband audio	Yes	Yes	No	Yes
iLBC support	Yes	Yes	No	Yes
"5-way" navigation cluster	Yes	Yes	Yes	Yes
XML application	Yes	Yes	Yes	Yes
Extension mobility	Yes	Yes	No	Yes
Video Advantage Camera support	Yes	Yes	N/A	No
Signaling protocol	SCCP/SIP	SCCP/SIP	SCCP	SCCP

Selected Part Numbers and Ordering Information

CP-7985-NTSC	Cisco Unified IP Phone 7985
CP-7971G	Cisco Unified IP Phone 7975G
CP-7965G	Cisco Unified IP Phone 7965G
CP-7962G	Cisco Unified IP Phone 7962G
CP-7960G	Cisco Unified IP Phone 7960G
CP-7945G	Cisco Unified IP Phone 7945G
CP-7942G	Cisco Unified IP Phone 7942G
CP-7940G	Cisco Unified IP Phone 7940G
CP-7925G	Cisco Unified IP Phone7925G
CP-7921G	Cisco Unified IP Phone7921G
CP-7931G	Cisco Unified IP Phone 7931G
CP-7911G	Cisco Unified IP Phone 7911G
CP-7906G	Cisco Unified IP Phone 7906G
CP-7937	Cisco Unified IP Conferencing Station 7937G
CP-7936G	Cisco Unified IP Conferencing Station 7936G

For More Information

For more information about the Cisco Unified IP Phone 7900 Series portfolio, visit: http://www.cisco.com/go/ipphones/7900.

Cisco Unified Attendant Console Portfolio

The Cisco Unified Attendant Console Portfolio comprises three full-featured software-based solutions, associated with a Cisco Unified IP Phone, which are designed to enable attendant operators to accept calls, easily look up busy status and dispatch incoming calls either through blind or consultative transfers to users. The applications support the ability to prioritize call queues, such that operator attendants can address the most important queues to the business (i.e., sales, service, etc). The Cisco Unified Department Attendant Console supports up to 150 Cisco Unified IP Phones and up to two operator clients per department. The Cisco Unified Business Attendant Console supports up to 500 Cisco Unified IP Phones and up to six operator clients. The Cisco Unified Enterprise Attendant Console supports up to 100,000 Cisco Unified IP Phones and up to 25 operator clients per attendant console system.

Key Features

Cisco Unified Department Attendant Console

- This application supports a maximum of 150 Cisco Unified IP Phones and two operator clients per department.
- Supports a call queuing engine, busy status, as well as directory search capabilities that are integrated into the Cisco Unified Communications Manager directory.

- One call queue and three directory search options allow the department administrators to quickly find call destinations and effectively dispatch calls. These search options include last name, first name, and extension.

Cisco Unified Business Attendant Console

- This application supports a maximum of 500 Cisco Unified IP Phones and up to six operator clients per attendant console system.
- Supports a powerful queuing engine to direct the calls to the operator and provides the operator several monitoring features to help ensure that incoming calls are handled efficiently. Four directory search options allow the operator to quickly find call destinations and quickly dispatch calls.
- Four directory search fields allow the operator to quickly find call destinations and quickly dispatch calls.
- For the operator who needs in-depth presence information, Cisco Unified Presence can be integrated with the Cisco Unified Business Attendant Console.

Cisco Unified Enterprise Attendant Console

- Supports a maximum of 100,000 Cisco Unified IP Phones and up to 25 operator clients per attendant console system
- Supports a powerful call queuing engine to direct the calls to the operator and provides the operator several monitoring features to help ensure that incoming calls are handled efficiently
- Six directory search fields allow the operator to quickly find call destinations and quickly dispatch calls
- Utilities for installing, configuring and synchronizing the directory database simplify administration
- Integrates with Cisco Unified Presence Server to provide rules-based presence in support of multiple devices and weighting per device (i.e., desk-based workers can weight their desk phone high and their mobile phone low)
- Emergency mode switch enables redirection of calls in an emergency
- Night mode service based on time and day
- Supports both zoom text and JAWS screen reader for enhanced accessibility

Selected Part Numbers and Ordering Information

CUD-ATT-CON	The Cisco Unified Department Attendant Console is ordered on a per-department administrator (operator client) basis. A maximum of two department administrators are supported per department with 150 IP phones. When ordering, the first client includes the software license for the Cisco Unified Department Attendant Console server. Ordering the Cisco Unified Department Attendant Consoles requires the use of the Cisco Dynamic Configuration Tool. Input "CUD-ATT-CON=" on the Dynamic Configuration Tool to begin the configuration, and then select from 1 to 10 Cisco Unified Department Attendant Consoles.
CUB-ATT-CON	The Cisco Unified Business Attendant Console is ordered on a per-operator client basis. Ordering the Cisco Unified Business Attendant Consoles requires the use of the Cisco Dynamic Configuration Tool. Input "CUB-ATT-CON=" on the Dynamic Configuration Tool to begin the configuration, and then select from 1 to 6 Cisco Unified Business Attendant Consoles.
CUE-ATT-CON	The Cisco Unified Enterprise Attendant Console is ordered on a per-operator client basis. Ordering the Cisco Unified Enterprise Attendant Console requires the use of the Cisco Dynamic Configuration Tool. Input 'CUE-ATT-CON=' on the Dynamic Configuration Tool to begin the configuration and then select from 1 to 25 Cisco Unified Enterprise Attendant Consoles.

For More Information

For more information about Cisco Unified Attendant Consoles, visit: http://www.cisco.com/go/ac.

Cisco Emergency Responder

Cisco Emergency Responder enhances emergency calling from Cisco Unified Communications Manager. It helps ensure that Cisco Unified Communications Manager sends emergency calls to the appropriate Public Safety Answering Point (PSAP) and then helps the PSAP identify the caller's location and, if necessary, return the call.

Key Features

- Cisco Emergency Responder automatically tracks IP phone locations by their MAC or IP addresses, eliminating the need for administrators to update location when an IP phone is relocated.
- Cisco Emergency Responder provides instructions to Cisco Unified Communications Manager to route emergency calls to a public-switched-telephone-network (PSTN) gateway capable of reaching the responsible Public Safety Answering Point (PSAP) for the caller's location.
- Cisco Emergency Responder identifies the caller's location to local exchange carriers (LECs) and PSAPs, replacing the calling-party number associated with an emergency call with one that corresponds to the caller's

location, eliminating the need to update the Automatic Location Information (ALI) database when an IP phone is relocated.

- Cisco Emergency Responder integrates with Intrado V9-1-1 service, centralizing and automating the initial administration of Emergency Location Identification Numbers (ELINs) and Emergency Response Locations (ERLs) for on-premises users, and facilitating emergency call completion with user-entered location information for off-premises users.
- Cisco Emergency Responder facilitates PSAP callback to reach the most recent callers from each location, including callers from stations without direct-inward-dialing (DID) numbers.
- Cisco Emergency Responder provides voice, web and email alerts to customer security personnel, enabling them to assist emergency callers immediately, and to direct fire, police, or ambulance services when they arrive.
- Cisco Emergency Responder is a software appliance that simplifies software installation and upgrade and enhances system security and stability.

Specifications

Feature	Cisco Emergency Responder			
Supported Platform	Cisco 7800 Series Media Convergence Servers			
Software Compatibility	Cisco Unified Communications Manager Cisco Unified Operations Manager More information about specific models and releases supported is available at: http://www.cisco.com/en/US/products/sw/voicesw/ps842/prod_release_notes_list.html.			
Product Compatibility	Cisco Unified IP Phones 7902G, 7905G, 7910G, 7910G+SW, 7911G, 7912G, 7940G, 7941G, 7941G-GE, 7942G, 7945G, 7960G, 7961G, 7961G-GE, 7962G, 7965G, 7970G, 7971G-GE, 7975G, 7985G; Cisco Unified Wireless IP Phones 7920, 7921 (IP-subnet-based tracking only); Cisco Unified IP Conference Stations 7935, 7936; Cisco Unified SIP Phone 3911, Cisco Unified Personal Communicator; Cisco IP Communicator; Cisco IP Softphone (IP-subnet-based tracking only); Cisco ATA 180 Series analog telephone adaptors (manual configuration only); Cisco VG 200 Series analog phone gateways (manual configuration only); Cisco Catalyst Express 500, Express 520, 2900 XL, 2940, 2950, 2960, 2970, 3500XL, 3550, 3560, 3560-E, 4000, 4500, 4500-E, 4900, 5000, 5500, 6000, 6500 and 6500-E Series LAN switches; Cisco Ethernet Switching Network Modules in Cisco 3700 Series Multiservice Access Routers, 2800 and 3800 Series Integrated Services Routers. More information about specific models and releases supported is available at: http://www.cisco.com/en/US/products/sw/voicesw/ps842/prod_release_notes_list.html.			
System Capacity	**MCS 7816**	**MCS 7825**	**MCS 7835**	**MCS 7845**
Automatically Tracked Phones	6000	12,000	20,000	30,000
Manually Configured Phones	1000	2500	5000	10,000
Roaming Phones (per Cisco Emergency Responder Cluster)	600	1200	2000	3000
Switches	200	500	1000	2000
Switch Ports	12,000	30,000	60,000	120,000

For More Information

For more information about the Cisco Emergency Responder, visit: http://www.cisco.com/go/cer.

Cisco IP Communicator

Cisco IP Communicator—a software-based application that delivers enhanced telephony support through the PC—is designed to meet diverse customer needs by serving as a supplemental telephone when traveling, a telecommuting device, or as a primary desktop telephone. With Cisco IP Communicator, remote users don't just take their office extension with them; they also enjoy access to the same familiar phone services that they have in the office.

Ideal for Companies That Need These Features

Cisco IP Communicator

- A softphone that provides high-quality voice calls and extensive telephony features
- A supplemental telephone that provides access to phone extensions and services outside the office

Key Features

- Works with Cisco Unified Video Advantage: Cisco IP Communicator brings video telephony to the telecommuter's and mobile worker's communication experience. Available video is automatically displayed.
- Easy to use: Cisco IP Communicator 7.x offers many of the features supported with Cisco Unified IP phones, including support for support for (Extensible Markup Language [XML]) applications, and call recording & silent monitoring capabilities for efficient recording of calls and monitoring of contact center agents. The application provides autodetection of Cisco VPN Clients.
- Offers premium voice quality: Cisco IP Communicator has an Audio Tuning wizard for setting audio levels properly, advanced-jitter-buffer and packet-loss-concealment algorithms, and echo suppression and noise cancellation. In addition, Cisco IP Communicator 7.x introduced support for internet Low Bit Rate Codec (iLBC), for enhanced voice quality for remote workers with low bandwidth considerations, as well as G.722 wideband audio codec to enhance which enhances voice quality and provides a clearer and richer audio experience.
- Easy to manage: Administration is unified with Cisco Unified IP Phones and automatic software upgrades; system administrators can provision Cisco IP Communicator as they would any other Cisco Unified IP Phone.

Selected Part Numbers and Ordering Information

SW-IPCOMM-E1	Cisco IP Communicator Software
SW-CCM-UL-IPCOMM-E	Station User License for Cisco Unified Communications Manager
IPCOMM7-SW	Cisco IP Communicator 7.0
IPCOMM7-LIC	Cisco IP Communicator 7.0 User License

For More Information

For more information about Cisco IP Communicator, visit: http://www.cisco.com/go/ipcommunicator.

Cisco Unified Application Environment

Cisco Unified Application Environment offers an increasingly rich portfolio of ready-to-use packaged applications that deliver immediate out-of-box value and custom development tools that allow clients to transform their business by integrating unified communications into other business applications as well as build their own custom applications.

Key Features

- A rich portfolio of packaged applications available today, with more being added each month. These applications span a wide variety of markets; some are designed for specific industries such as retail and healthcare, whereas others are applicable to all industries.
- These automated test tools perform functional, load, system, and regression tests to reduce test cycles and increase the success rate of project completion.
- This set of application lifecycle management tools standardizes, centralizes, and automates management of all unified communications applications.
- A standard applications container facilitates development, quality assurance, and operations to collaboratively manage scalability, performance, and reliability of all unified communications applications.
- The solution summarizes implementation differences across products and versions to minimize interoperability challenges, so customers can upgrade their unified communications infrastructure without breaking their applications.
- Increased support for integrated development environments including Eclipse and Microsoft Visual Studio, allows web and enterprise developers who lack telephony skills to easily and rapidly develop feature-rich applications.

Specifications

Components	Cisco Unified Application Environment
Cisco Unified Application Designer	The Cisco Unified Application Designer is a visual integrated development environment (IDE). Without learning the complex details of telephony protocols, developers with little or no Unified Communications development expertise can use the Cisco Unified Application Designer to easily and rapidly develop rich applications that converge voice and video with enterprise applications and data.
Cisco Unified Application Server	The Cisco Unified Application Server is an application server for converged voice, video and data applications. It abstracts the complexity of telephony protocols, protects the reliability of the IP call processing system from the applications, and provides a standard way to manage applications.

Cisco Unified Media Engine	The Cisco Unified Media Engine is a software-only media server. It provides ready-to-use and sophisticated media processing capabilities for all applications built using the Cisco Unified Application Designer.

Selected Part Number and Ordering Information

Configuration and ordering of Cisco Unified Application Environment products can be complicated because of the arbitrary and highly variable nature of the application developed. Please consult your Cisco account team or channel partner if you have any configuration, ordering and pricing questions.

For More Information

For more information about Cisco Unified Application Environment, visit:
http://www.cisco.com/en/US/netsol/ns738/networking_solutions_package.html.

Cisco Unified MeetingPlace Conferencing

Cisco Unified MeetingPlace conferencing is a rich-media collaboration solution within Cisco Unified Communications. It delivers an exceptional user experience with integrated voice, video, and web collaboration and industry-leading setup, attendance, and in-meeting controls. You can realize significant cost savings and security because the solution is deployed on-premises, over your IP network. In addition, the Cisco Unified MeetingPlace solution extends the value of Cisco WebEx meeting applications with integrated, on-premises voice conferencing.

Key Features

- Cost savings—Cisco Unified MeetingPlace conferencing is deployed on-premises on an organization's converged IP network, a scenario that can reduce costs by virtually eliminating conferencing telephony and service fees paid to service providers.
- Deployment flexibility—On-premises voice conferencing for Cisco WebEx meeting applications—You can deploy the Cisco Unified MeetingPlace solution as a complete on-premises voice, video, and web conferencing solution or integrate it with Cisco WebEx web conferencing services. These solutions together combine the cost savings advantages of on-premises voice conferencing with the productivity benefits of on-demand web conferencing.
- Tightly integrated rich-media conference setup—Cisco Unified MeetingPlace conferencing supports multiple interfaces for initiating impromptu conferences or scheduling future rich-media conferences. In a single step, meeting organizers can schedule or initiate immediate voice, video, and Web resources through a Web interface, touch-tone and Cisco Unified IP Phone, and Microsoft Outlook or IBM Lotus Notes calendar.
- Easy attendance of rich-media conferences—Attending a rich-media conference is as simple as a single mouse click. Cisco Unified MeetingPlace conferencing simultaneously launches the Web conference and dials out to the user's voice or video endpoint (either a room-based video system or desktop endpoint). Participants can also connect to the voice and video portions of the conference by directly dialing in from any video endpoint or telephone.
- Advanced rich-media conference capabilities and control:
  - Cisco Unified MeetingPlace conferencing tightly integrates voice, video, and Web conferencing capabilities for highly engaging and productive virtual meetings and interactions. With feature-rich voice, video, and Web conferencing capabilities, support for presentation of rich content, and preconfigured meeting application templates, Cisco Unified MeetingPlace conferencing gives organizations a single conferencing solution that meets a wide range of conferencing needs, including collaborative meetings, presentations, training, and Web seminars.
  - Cisco Unified MeetingPlace conferencing provides industry-leading in-meeting controls within the Web conference. Without disrupting a meeting, users know who is attending, how users are attending (voice, video, or web), who is speaking, and who is sharing.
  - With carrier-grade hardware and advanced system software, the Cisco Unified MeetingPlace solution delivers the scalability, reliability, simplified administration, security, and cost-effectiveness that IT organizations require.
- Security:
  - The solution offers a dedicated on-network system; each customer is provided with a dedicated Cisco Unified MeetingPlace solution integrated with the private network.
  - The solution offers Internet lockout controls; meetings can be set up as internal-only meetings and held entirely behind the corporate firewall or as external meetings that are accessible to Internet and internal participants. Administrators and meeting organizers have complete control.
  - The solution offers access authentication, encryption, and in-session meeting controls.

For More Information

For more information about Cisco Unified MeetingPlace conferencing, visit: http://www.cisco.com/go/meetingplace.

Cisco Unified MeetingPlace Express

Cisco Unified MeetingPlace Express, part of the Cisco Unified Communications family of products, is an integrated voice, Web, and video conferencing solution that helps midsize organizations realize the cost savings and productivity benefits of deploying conferencing over internal networks. Cisco Unified MeetingPlace Express provides simple, powerful conferencing functions that are easy to deploy and manage. As a component of the Cisco Unified Communications System, Cisco Unified MeetingPlace Express delivers productivity that goes beyond traditional conferencing solutions by enabling rich-media conferencing used in a broad range of communication scenarios.

Key Features

- Cost savings and security—Cisco Unified MeetingPlace Express is deployed in-house on an organization's converged IP network, a scenario that can reduce costs by virtually eliminating conferencing telephony and service fees paid to service providers.
- Easy deployment and management—Cisco Unified MeetingPlace Express is a software solution installed on a single server that supports industry-standard protocols (H.323 and SIP), to help ensure connectivity with a range of telephony systems, including Cisco Unified Communications Manager and Cisco Unified Communications Manager Express.
- Simple conference setup and attendance—Cisco Unified MeetingPlace Express includes Microsoft Outlook, Web, Cisco Unified IP Phone, and touchtone phone interfaces for setting up and attending meetings. In a single step, meeting organizers can initiate an immediate (reservationless) voice, Web, and video conference from any of these interfaces.
- Advanced voice, web, and video conferencing—Cisco Unified MeetingPlace Express tightly integrates voice, Web, and video conferencing capabilities, making it well-suited for interactive meetings and presentations. Meeting attendees experience high-quality voice conferencing, and video participants see the person who is speaking or the person who last spoke.
- Cisco Unified MeetingPlace Express provides innovative meeting-management functions that facilitate more productive meetings. From the Web interface, users can mute and unmute themselves, see who is in the meeting and how they are participating (voice, video, or Web), see who is speaking, and see who is sharing content.
- Cisco Unified Personal Communicator users can share content through a simple screen-sharing interface served by Cisco Unified MeetingPlace Express. In addition to adding impromptu Web conferencing support, Cisco Unified Personal Communicator environments can add multiparty voice and video capabilities with Cisco Unified MeetingPlace Express VT.
- Security—Security features include Secure Sockets Layer (SSL) encryption; behind-the-firewall deployment; and multiple meeting security options, including meeting access authentication and in-meeting controls such as "lock-meeting" and "remove-participants" functions. The solution offers Internet lockout controls; meetings can be set up as internal-only meetings and held entirely behind the corporate firewall or as external meetings that are accessible to Internet and internal participants. Administrators and meeting organizers have complete control.

Specifications

Feature	Cisco Unified MeetingPlace Express
IP Phone Application Compatibility	Cisco Unified IP Phone 7940 Series, Cisco Unified IP Phone 7960 Series, Cisco Unified IP Phone 7970 Series, Cisco IP Communicator
Capacity	Cisco Unified MeetingPlace Express can support a variety of combinations of voice, web, and video conferencing capacity, as well as varying amounts of recording capacity. The maximum meeting size is 200 concurrent users of voice conferencing, 200 concurrent users of web conferencing, and 200 concurrent users of video conferencing.
Call Control System Compatibility	• Cisco Unified Communications Manager Version 3.3 or later (video is supported with version 4.1 or later, 5.1 or later, and 6.0 or later) • Cisco Unified Communications Manager Express 3.3 or later (does not support video in meetings) • Standards-based H.323 * or SIP ** call-control systems
Platform	Cisco Media Convergence Servers • Voice, web, and video conferencing media convergence server part numbers—MCS-7825-H3-RC1, MCS-7825-I3-RC1, MCS-7825-H2-RC1, MCS-7825-I2-RC1, MCS-7825-H1-RC1, MCS-7825-I1-RC1, MCS-7835-H2-RC1, MCS-7835-I2-RC1, MCS-7835-H1-RC1, MCS-7835-I1-RC1, MCS-7845-H2-RC1, MCS-7845-I2-RC1, MCS-7845-H1-RC1, and MCS-7845-I1-RC1 • Media-convergence-server part numbers for voice conferencing with lite meeting room only—MCS-7825H-3.0-IPC1, MCS-7825I-3.0-IPC1, MCS-7835H-3.0-IPC1, MCS-7835I-3.0-IPC1, and MCS-7845H-3.0-IPC1 (supports web conferencing) Plus exact equivalent third-party servers (for information, visit http://www.cisco.com/go/swonly; DVD drive required)

Client Compatibility	Microsoft Windows · Operating system—Windows 2000 Pro (SP2 or later), Windows 2000 Server Edition (SP2 or later), Windows 2000 Advanced Server (SP2 or later), Windows XP (SP1 or later) · , or Windows Vista (Business or Enterprise) · Browser—Internet Explorer 5.5 or later; Netscape 7.1 or later; Mozilla 1.6 or later; or Firefox 1.0.3 or later · Adobe Flash Player—8 or later Apple Macintosh · Operating system—Mac OS 9.2* or Mac OS 10.2 or later · Browser—Safari 1.1 or later; Netscape 7.1 or later; Mozilla 1.2.1* or 1.6 or later; or Firefox 1.0.3 or later · Adobe Flash Player—8 or later Linux** · Operating system—Red Hat 9 or Red Hat Enterprise Linux 3 or later · Browser—Netscape 7.1 or later; Mozilla 1.4 or 1.6 or later; or Firefox 1.0.3 or later · Adobe Flash Player—8 or later Sun Solaris** · Operating system—Solaris 9 or Solaris 10 · Browser—Netscape 7.1; Mozilla 1.4 or 1.7 or later; or Firefox 1.0.3 or later · Adobe Flash Player—8 or later

For More Information

For more information about Cisco Unified MeetingPlace Express, visit: http://www.cisco.com/go/meetingplaceexpress.

Cisco Unified Personal Communicator

An integral component of the Cisco Unified Communications Family of products, Cisco Unified Personal Communicator transparently integrates your most frequently used communications applications and services into a single, unified client. From an easy-to-use interface on a PC or Mac, it provides quick and easy access to powerful communications tools—softphone, presence, instant messaging, visual voicemail, click to call, employee directory, communication history, video, and web conferencing—to help you communicate effectively and work more productively.

Ideal for Companies That Need These Features

Cisco Unified Personal Communicator	· A unified client that transparently integrates presence, voice, video, instant messaging, and Web conferencing · Powerful communications capabilities integrated with the personal computer, including integrated contact lists, Click-to-Call, voicemail playback, inbound call notification, and media escalation · A supplemental telephone that provides access to phone extensions and services outside the office

Key Features

- Communication integration—Take advantage of a single, intuitive interface for voice and video calls, instant messaging, voicemail playback, web conferencing, and integrated directories.
- Presence: View real-time availability of other Cisco Unified Personal Communicator and Cisco Unified IP Phone users. You can also display customized messages, set an out-of-office message, and automatically show your availability based on free and busy status on your Microsoft Outlook Calendar.
- Do not disturb (DND): Easily block incoming calls with synchronized DND status from your Cisco Unified Personal Communicator or Cisco Unified IP Phone or use the privacy preference setting to block instant messages when you need additional privacy.
- Contact list—Search your corporate directory from one easy-to-use interface to locate contacts quickly and simply click to call. Add your most frequently contacted personal contacts, co-workers, and federated business contacts.
- Click to call—Dial from the contact list, using either the integrated softphone or an associated Cisco Unified IP Phone. You can also click to call directly from Microsoft Outlook using an Outlook toolbar.
- Integrated voice and video calling: Exchange ideas face-to-face with a coordinated video display on the PC screen and audio conversation with the softphone. You can place video calls using Cisco Unified Personal Communicator, Cisco Unified Video Advantage, or the Cisco Unified IP Phone 7985G, a personal desktop videophone.
- Instant messaging—Chat in real time using instant messaging with other Cisco Unified Personal Communicator users to save time and reduce phone tag.Conferencing—Create voice or video conferencing sessions by simply merging conversation sessions. There is no need to call into a separate conference bridge.
- Web conferencing—Launch a Cisco Unified MeetingPlace or Cisco Unified MeetingPlace Express web conferencing session at a moment's notice to share content, such as a presentation, with others.

- Voice messages—Access secure Cisco Unity or Cisco Unity Connection encrypted voicemail messages—view, play back, sort, and delete messages—all from within the application.

Selected Part Numbers and Ordering Information

UPC-CLIENT-K9-PC	Cisco Unified Personal Communicator
UPC-CAMERAS-24=	Cisco VT Camera II 24 Unit Bundle
UPC7-K9-PC	Cisco Unified Personal Communicator 7.0
UPC7-CLIENT-LIC	Cisco Unified Personal Communicator 7.0 User License

For More Information

For more information about the Cisco Unified Personal Communicator, visit: http://www.cisco.com/go/unifiedpersonalcom.

Cisco Unified Presence

Cisco Unified Presence is a standards-based platform that collects information from multiple sources about user availability and communications capabilities to provide rich presence status and facilitate presence-enabled communications with Cisco Unified Communications and other critical business applications.

Ideal for Companies That Need These Features

Cisco Unified Presence

- Looking to increase productivity by providing the ability to connect with colleagues on the first try by knowing their availability in advance on either Cisco Unified Personal Communicator or Cisco Unified IP Phone
- Seeking to enhance collaboration by sharing availability information and instant messages with co-workers within your business or between businesses with Cisco Unified Personal Communicator
- Exposing presence information and user communications capabilities in corporate web directories, point-of-sales applications, or customer-relationship-management systems through Cisco Unified Application Environment and standards-based application programming interfaces (APIs) on Cisco Unified Presence
- Allowing subject matter experts anywhere in your enterprise to handle incoming customer calls with presence capabilities delivered with Cisco Unified Expert Advisor, Cisco Unified Presence, and Cisco Unified Personal Communicator

Key Features

- Cisco Unified Presence provides enterprise-class scalability, redundancy, and high availability desired by large businesses and organizations.
- Cisco Unified Presence provides a standards-based connectivity to any Session Initiation Protocol (SIP) or SIMPLE capable application or network.
- Cisco Unified Presence supports business-to-business federation with Cisco Unified Presence and Microsoft Live Communications Server (LCS) or Microsoft Office Communications Server (OCS) to enable them to secure exchange instant messaging and presence information between users in different businesses or organizations.
- Cisco Unified Presence provides the SIP proxy services needed to support large Cisco Customer Voice Portal 4.0 (and later) deployments.

Selected Part Numbers and Ordering Information

SW-CUP6.0-K9=	License Cisco Unified Presence 6.0 Application Software
CUP6.0-U-K9=	SW Upgrade UPS 1.0 to CUP 6.0
SW-CUP7.0-K9	Cisco Unified Presence 7.0 Application Software
CUP-Server-LIC	Cisco Unified Presence Server User Licenses

For More Information

For more information about Cisco Unified Presence, visit: http://www.cisco.com/en/US/products/ps6837/index.html.

Cisco UC Integration for Microsoft Office Communicator

Instantly access enhanced Cisco Unified Communications directly from Microsoft Office Communicator 2007 on your PC. With this easy-to-deploy desktop integration, extend proven Cisco unified communications services to your workspace and benefit from the investment protection and reduced complexity delivered by a single call control solution.

Ideal for Companies That Need these Features

Cisco UC Integration for Microsoft Office Communicator	• Existing or prospective Cisco Unified Communications Manager customers with existing investments in Microsoft Office Communications Server (OCS) seeking to enable real-time UC experience from existing Microsoft Office Communicator presence & IM client.

Key Features

- Integrated Cisco IP softphone—Click to call directly from your desktop to have a business-class communication experience with embedded Cisco IP softphone.
- Cisco IP phone quality & rich mid-call control—Have a business-class desktop communications experience with the quality and reliability that you experience with your Cisco IP deskphone in the office.
- Deskphone control—Simply click to make or answer business calls through your desk phone using its calling features & resources to have a rich communications experience.
- Phone presence—Adds telephony presence to your contact list - providing additional information on when the contact might be available.
- One click voice messages & communications history access—With a mouse click access your corporate voice messages and communications history and rapidly respond to voice messages or missed calls.
- Impromptu multiparty conferencing—If you need to initiate an impromptu collaboration session with multiple contacts on your contact list, you can also initiate multiparty conference calls from your desktop and quickly add additional participants.

Select Product Parts and Ordering Information

UCIMOC-7.1-K9	Cisco Unified Communications Integration™ for Microsoft Office Communicator
UCIMOC-7.1-LIC	Cisco Unified Communications Integration™ for Microsoft Office Communicator License

For More Information

For more information about Cisco UC Integration™ for Microsoft Office Communicator, visit: http://www.cisco.com/go/ucintegrationmicrosoft.

Cisco Unity Connection

Cisco Unity Connection provides voicemail or integrated messaging with speech recognition and call routing rules on an easy-to-manage Linux platform.

Key Features

- Access voice messages anytime from a variety of clients and devices: e-mail inbox, web browser, desk phone, instant messaging client, and mobile phones, including natural language-based speech access on phones.
- The flexible platform allows for configuration as voicemail or integrated messaging on a Linux appliance.
- The system is scalable to 144 ports and 10,000 users per server.
- The solution supports Voice Profile for Internet Mail (VPIM) to facilitate interoperability with older voicemail systems.
- Integration with the Cisco Fax Server allows you to send and receive fax messages from your e-mail inbox.
- The solution offers robust Automated-Attendant functions that include intelligent routing and easily customizable call-screening and message-notification options.

Specifications

Feature	Cisco Unity Connection 7.1
Unity Voice Mail (VM) and Unified Messaging (UM) possible configurations	• 10,000 users and 144 ports maximum, 50,000 VPIM networked users with 10 nodes • Configured for Cisco Unified Communications Manager or configured for legacy PBX/dual integration
Options	Voice Mail, IMAP Client Messaging, Text To Speech, Cisco Personal Communications Assistant web client

Selected Part Numbers and Ordering Information

UNITYCN7-25USR	Cisco Unity Connection, 24 ports, 25 users - All user Features
UNITYCN7-100USR	Cisco Unity Connection, 24 ports, 100 users - All user Features

For More Information

For more information about Cisco Unity Connection, visit: http://www.cisco.com/go/unityconnection.

Cisco Unity Express

Cisco Unity Express provides integrated messaging, voicemail, Automated Attendant services, and optional interactive voice response (IVR) and time card services specifically for the small- and medium-sized office or branch office. The application is delivered on either a network module or advanced integration module, both of which are supported on a variety of voice-enabled integrated services routers.

Ideal for Companies That Need these Features

Cisco Unity Express	• Integrated messaging, voicemail, Automated Attendant, or interactive-voice-response (IVR) or time card services at the branch or small office to support local users • Up to 250 users per site

Key Features

- The solution offers affordable messaging and greeting services for increased customer service and rich employee communications.
- Intuitive telephone prompts and a web-based interface provide fast, convenient voicemail and Automated Attendant administration.
- Cisco Unity Express can view, sort, search, and play back voice messages using the display of a Cisco Unified IP Phone or your e-mail client.
- The new TimeCard View solution is a time and attendance application that allows employees, supervisors, and payroll specialists to enter and manage time-card data.
- The solution offers scalability from 4 to 16 concurrent voicemail or Automated Attendant calls and 12 to 250 mailboxes.
- The solution is deployable with Cisco Unified Communications Manager Express, Cisco Unified Communications Manager, Cisco Unity, and Cisco Unity Connection systems.

Specifications

Feature	Cisco Unity Express
Hardware	NME-CUE or AIM-CUE, fully self-contained modules with onboard storage, memory, and processing supporting a variety of mailbox densities, storage capacities, and concurrent sessions to meet the needs of every small-to-medium office or branch
Software	Cisco Unity Express release 7.0
Platform Supported	Cisco 1800, 2800, and 3800 Series Integrated Services Routers

For More Information

For more information about Cisco Unity Express, visit: http://www.cisco.com/go/cue.

Speech Connect for Cisco Unity Unified Messaging

Speech Connect for Cisco Unity is a speech-enabled Automated Attendant for the enterprise. Internal or external callers can speak the name of an employee into the phone and instantly be connected to that employee. Enhanced software fine-tunes pronunciation, improving accuracy over time for superior voice-recognition performance.

Key Features

- Speech Connect for Cisco Unity offers unmatched performance in speech recognition because of advanced disambiguation, the names-tuning service, and a dynamic names dictionary.

Selected Part Numbers and Ordering Information

SC-UNITY-NAME	One Speech Connect Cisco Unity Name
SC-GUEST-NAME	One Speech Connect Non-Cisco Unity Name
SPCH-CON-DAY2	Speech Connect Day2 Name Tuning—1 Name for 1 Year

For More Information

For more information about Speech Connect for Cisco Unity unified messaging, visit: http://www.cisco.com/en/US/products/ps9676/index.html.

Cisco Unity Unified Messaging

Cisco Unity unified messaging is a reliable, secure, scalable, and full-featured unified messaging platform.

Key Features

- Access voice messages anytime from a variety of clients and devices: Email inbox, web browser, desk phone, instant messaging client, and mobile phones, including speech access on phones.
- The flexible platform allows for configuration as voicemail or unified messaging, with a single message store on a Microsoft Exchange or Lotus Domino email server or a separate message store for voice messages.
- The system is scalable to 200 ports and 15,000 users per server; it offers server options with multiple processors, redundant fans, redundant power supplies, and Redundant Array of Independent Disks (RAID) hard disk drives.
- The solution supports Audio Messaging Interchange Specification analog (AMIS-A), Voice Profile for Internet Mail (VPIM), and Cisco Unity Bridge for Octel to facilitate interoperability with older voicemail systems.
- Integration with the Cisco Fax Server allows you to send and receive fax messages from your email inbox.

Specifications

Feature	Cisco Unity Unified Messaging
Unity Voice Mail (VM) and Unified Messaging (UM) Possible Configurations	15,000 users and 200 ports maximum, 250,000 networked users Configured for Cisco Unified Communications Manager or configured for legacy PBX/dual integration
Options	Voice Mail; Unified Messaging; Microsoft Exchange or Lotus Domino message store; Failover for Exchange; Cisco Unity Bridge for Exchange

Selected Part Numbers and Ordering Information

Cisco Unity 7.0 Software and Server Licenses	
UNITY7-USR-E	Cisco One Unity VM/UM for Exchange User
UNITY7X-SL-32	Cisco Unity server license for VM or UM, 32 ports
UNITY7X-SL-MAX	Cisco Unity server license for VM or UM, maximum ports

For More Information

For more information about Cisco Unity unified messaging, visit: http://www.cisco.com/go/unity.

Cisco Unified Messaging Gateway

The Cisco Unified Messaging Gateway provides an open and secure method of intelligently routing messages and exchanging subscriber and directory information within a unified messaging network. It acts as the central hub in a network of Cisco unified messaging solutions and third-party gateways that interface with older voicemail systems.

Ideal for Companies That Need these Features

Cisco Unified Messaging Gateway	• Scale the unified messaging network as required for branch-office customers and larger distributed enterprises • Simplify configuration tasks and centralize voicemail system management • Transparently integrate Cisco Unified Communications solutions into existing voicemail installations

Key Features

- Integrate small to large-scale unified messaging deployments that consist of more than five Cisco Unity Express systems.
- Integrate up to 10,000 mixed Cisco Unity Express, Cisco Unity, and Cisco Unity Connection systems.

Specifications

Feature	Cisco Unified Messaging Gateway
Hardware	NME-UMG or NME-UMG-EC
Platform Supported	Cisco 2800 and 3800 Series Integrated Services Routers

For More Information

For more information about the Cisco Unified Messaging Gateway, visit: http://www.cisco.com/go/umg.

Cisco Voice and Security Bundles

Voice and security bundles are designed for enterprise branch offices, small and medium-sized businesses (SMBs), and managed network service providers seeking consolidated, easy-to-order, versatile, and cost-effective solutions.

- Cisco Integrated Services Router Unified Communications Bundles include a Cisco integrated services router with necessary memory and the recommended Cisco IOS Software feature set; Cisco Unified Communications Manager Express licenses for call processing; Cisco Unity Express hardware, software, and feature licenses for voicemail and integrated messaging; Digital-signal-processor (DSP) resources for conferencing and public-switched-telephone-network (PSTN) connectivity to IP; Phone device licenses to deploy Cisco Unified IP Phones; Cisco Unified CallConnector for Microsoft Windows personal client desktop integration
- Cisco Unified Communications Manager Express Voice Bundles include a Cisco integrated services router with necessary memory and the recommended Cisco IOS Software feature set; Cisco Unified Communications Manager Express licenses for call processing; DSP resources for conferencing and PSTN connectivity to IP.
- Cisco Unified Survivable Remote Site Telephony (Unified SRST) Voice Bundles include a Cisco integrated services router with necessary memory and the recommended Cisco IOS Software feature set; Cisco Unified SRST feature licenses; DSP resources to support PSTN connectivity to IP
- H-VSEC Bundles include a Cisco integrated services router with necessary memory and the recommended Cisco IOS Software feature set; Cisco Unified Communications Manager Express feature license, which can also be used for SRST; DSP resources for conferencing and PSTN connectivity to IP; Cisco Unified Border Element licenses for connecting to a SIP telephony provider or to connect multiple sites together; Cisco IOS Advanced IP Services; A Cisco AIM-VPN accelerator card for maximum performance of security features, including VPN tunneling

For customers who want to deploy security features along with voice features using the Cisco Integrated Services Router enabled with either Cisco Unified Communications Manager Express, or Cisco Unified Survivable Remote Site Telephony (SRST) they can buy the voice-plus-security versions of these bundles. The voice-plus-security bundles add security features such as VPN, firewall, and intrusion detection systems (IDSs) to the existing voice and data features provided.

Ideal for Companies That Need These Features

Cisco Voice and Security Bundles	• Support for 8 to 250 phones per location; data, IP telephony, and VPN in an all-in-one solution based on a Cisco integrated services router • Low entry price for a complete unified communications solution with room to grow in the future • Investment protection (for customers who may migrate from Cisco Unified Communications Manager Express to Cisco Unified Communications Manager as the future dictates)

Selected Part Numbers and Ordering Information

Cisco Integrated Services Router Unified Communications Voice plus Security Bundles	
C3845-35UC-VSEC/K9	Cisco 3845 UC Bundle with IOS Adv IP Services, PVDM2-64, NME-CUE, 35 CME feature licenses, CUE user mailbox licenses and phone device licenses;128 MB Flash/512 MB DRAM, 10 UCC Personal licenses
C2851-35UC-VSEC/K9	Cisco 2851 UC Bundle with IOS Adv IP Services, PVDM2-48, NME-CUE, 35 CME feature licenses, CUE user mailbox licenses and phone device licenses, 128 MB Flash/256 MB DRAM, 10 UCC Personal licenses
C2801-10UC-VSEC/K9	Cisco 2801 UC Bundle with IOS Adv IP Services, PVDM2-32, AIM-CUE, 10 CME feature licenses, CUE user mailbox licenses and phone device licenses, 128 MB Flash/256 MB DRAM, 2 UCC Personal licenses
C1861-2B-VSEC/K9	Cisco 1861 UC Bundle with IOS Adv IP Services, PVDM2-32, On board CUE hardware, 8 CME feature licenses, CUE user mailbox licenses and phone device licenses, 4 FXS ports,2 BRI ports, 8 Power Over Ethernet ports, 128 MB Flash/256 MB DRAM, 2 UCC Personal licenses
Cisco Unified Communications Manager Express Voice plus Security Bundles	
C3845-VSEC-CCME/K9	Cisco 3845 Voice Bundle with IOS Adv IP Services, PVDM2-64, FL-CCME (250 users), 128 MB Flash/512 MB DRAM
C2851- VSEC-CCME/K9	Cisco 2851 Voice Bundle with IOS Adv IP Services, PVDM2-48, FL-CCME (100 users), 128 MB Flash/256 MB DRAM

C2801- VSEC-CCME/K9	Cisco 2801 Voice Bundle with IOS Adv IP Services, PVDM2-8, FL-CCME (25 users), 128 MB Flash/256 MB DRAM
Cisco Survivable Remote Site (SRST) Voice plus Security Bundles	
CISCO3845-SRST/K9	Cisco 3845 Voice Bundle with IOS Adv IP Services, PVDM2-64, FL-SRST (250 users), 128 MB Flash/512 MB DRAM
CISCO2851-SRST/K9	Cisco 2851 Voice Bundle with IOS SP Services, PVDM2-48, FL-SRST (100 users), 128 MB Flash/256 MB DRAM
CISCO2801-SRST/K9	Cisco 2801 Voice Bundle with IOS Adv IP Services, PVDM2-8, FL-SRST (25 users), 128 MB Flash/256 MB DRAM
Cisco H-VSEC Bundles	
C3845-H-VSEC/K9	Cisco 3845 High Performance Voice Security Bundle with IOS Advanced IP Services, PVDM2-64, AIM-VPN/SSL-3, 25 User SSL License, 100 users feature license for CME/SRST, 512 MB Flash/1 GB DRAM
C2851-H-VSEC/K9	Cisco 2851 High Performance Voice Security Bundle with IOS Advanced IP Services, PVDM2-48, AIM-VPN/SSL-2, 10 User SSL License, 50 users feature license for CME/SRST, 256 MB Flash/512 MB DRAM
C2821-H-VSEC/K9	Cisco 2821 High Performance Voice Security Bundle with IOS Advanced IP Services, PVDM2-32, AIM-VPN/SSL-2, 10 User SSL License, 50 users feature license for CME/SRST, 256 MB Flash/512 MB DRAM
C2801-H-VSEC/K9	Cisco 2801 High Performance Voice Security Bundle with IOS Advanced IP Services, PVDM2-8, AIM-VPN/SSL-2, 10 User SSL License, 25 users feature license for CME/SRST, 128 MB Flash/384 MB DRAM

For More Information

For more information about Cisco Unified Communications Manager Express, visit: http://www.cisco.com/go/ccme.

For more information about Cisco Unified Survivable Remote Site Telephony, visit: http://www.cisco.com/go/srst.

Cisco Unified Mobile Communicator

As an integral part of the Cisco Unified Communications Family of products, Cisco Unified Mobile Communicator is a software application that enables collaboration by securely extending Cisco Unified Communications to mobile smartphones. With Cisco Unified Mobile Communicator, you can place and receive calls, access company directory contacts, check presence information, and review voice-mail messages, as well as receive Cisco Unified MeetingPlace notifications and other vital information, all from a single, intuitive interface.

Key Features

- Unified contact list—Search your corporate directory (Microsoft Active Directory) and personal contacts (Microsoft Outlook) from one, easy-to-use interface to locate contacts quickly.
- Presence—View a person's availability status from the directory on your mobile handset.
- Single business number—Single number reach, supported by Cisco Unified Mobility, makes it easier for you to be reached and gives you the flexibility to answer the call that is most important for you at a given time.
- Dial via Office—Transparently place calls through Cisco Unified Communications Manager to reduce toll charges and meet regulatory requirements.
- Secure text messaging—Send and receive text messages from colleagues when they are unavailable to talk. Incoming messages are conveniently grouped by person, showing the sender, the priority, and a brief subject line, if available.
- Visual voicemail—You have visual access to Cisco Unity and Cisco Unity Connection voicemail messages. Select, view, play back, and delete messages in any order—all from your smartphone.
- Conferencing—Receive Cisco Unified MeetingPlace conference notifications on your smartphone. With a simple press of a button, you can access the conference bridge.
- Call logs—View a list of recent calls on your mobile device and learn what calls were missed, placed, and received from your mobile device and your Cisco Unified IP Phone.
- Broad operator and device support—Working simultaneously across multiple networks, mobile operators, and handset platforms, Cisco Unified Mobile Communicator helps ensure end-user choice and delivery.
- Enterprise-grade security—Cisco Unified Mobility Advantage server is deployed securely behind the enterprise firewall. It uses industry-standard Secure Sockets Layer (SSL) and Transport Layer Security (TLS) encryption to protect transmission of data between handsets and your corporate infrastructure.
- Management—Simple, web-based management allows IT staff to manage user activation, configuration, and administration; set system privileges and security; report statistics; and manage devices. The end-user portal allows provisioning, directory management, and configuration of user preferences.

Selected Part Numbers and Ordering Information

CUMC-K9-V3	Cisco Unified Mobile Communicator

For More Information

For more information about Cisco Unified Mobile Communicator, visit: http://www.cisco.com/en/US/products/ps7271/index.html.

Cisco Unified Mobility

Cisco Unified Mobility is a native application to Cisco Unified Communications Manager that streamlines communications and optimizes the communications experience with single number reach.

Key Features

- Single Number Reach—Publish one number for multiple devices to simplify communications and preserve your office identity.
- Transparently move active phone calls between your mobile phone and your Cisco Unified IP Phone without interrupting a call to optimize the communications experience.
- Answer calls on the device that is most suitable to you at any given time with the ability to ring up to four devices simultaneously.
- Anchor calls in Cisco Unified Communications Manager to apply policy.

For More Information

For more information about Cisco Unified Mobility, visit: http://www.cisco.com/en/US/products/ps6567/index.html.

Cisco WebEx Meeting Center on the iPhone

Cisco WebEx Meeting Center for the iPhone is a free downloadable application for the iPhone that allows users to actively collaborate in Cisco WebEx Meeting Center meetings.

Key Features

- Schedule meetings and invite attendees from your iPhone
- Start and/or attend scheduled meetings from your iPhone with integrated audio and data
- View shared presentations, applications and desktops with live annotations
- View the meeting attendee list
- Give presentation control to other meeting participants joined from a computer
- Chat with meeting participants

For More Information

For more information about Cisco WebEx Meeting Center for iPhone, visit: http://www.webex.com/iphone/

Cisco WebEx Meeting Center on SmartPhone Browsers

Using the browser on a smartphones, users can attend fully participate in Cisco WebEx Meeting Center meetings, view presentations applications and desktops with live annotations.

Key Features

- Attend pre-scheduled meetings from your smartphone with integrated audio and data
- View shared presentations, applications and desktops with live annotations
- View the meeting attendee list

For More Information

For more information about Cisco WebEx Meeting Center on Smartphone Browsers, visit: http://www.webex.com/mobile/

Cisco Mobile Supervisor

Cisco Mobile Supervisor for is a free application available from Apple Inc's App Store that extends the Cisco Supervisor Desktop (CSD) of Cisco Unified Contact Center Express to the iPhone 3G and iPod Touch.

Key Features

- A list of Contact Service Queues (CSQs) belonging to a selected team
  - The Voice CSQ Summary report for a selected CSQ

- The list of agents (along with their states) belonging to the selected CSQ
- A list of agents (along with their states) belonging to a selected team
- Color-coded indicators to identify whether a CSQ's Calls in a Queue or Oldest Call in a Queue fields have exceeded user-configured thresholds. You can specify/change these threshold values at any time.

For More Information

For more information about the Cisco Mobile Supervisor, visit:
http://www.cisco.com/en/US/prod/collateral/voicesw/custcosw/ps5693/ps1846/ciscomobile_vds.html

Nokia Call Connect for Cisco

Enables select Nokia dual-mode handsets to operate on Cisco Unified Wireless Networks (VoWLAN/802.11 b/g) and access advanced features of Cisco Unified Communications Manager and Cisco Unified Communications Manager Express to reduce cellular costs and improve communications.

Key Features

- Access mid-call features, including call pick-up, group pick-up, call park, shared line appearance and conferencing
- Extension dialing
- Enterprise voice mail messaging waiting indicator
- Enhance in-building mobility experience with pervasive Cisco Unified Wireless Network coverage

For More Information

For more information about Nokia Call Connect for Cisco, visit: http://www.cisco.com/go/nokia

Cisco Unified Contact Center Enterprise

Cisco Unified Contact Center Enterprise delivers skills-based contact routing, voice self-service, computer telephony integration (CTI), and multichannel contact management over an IP infrastructure. With multichannel automatic-call-distributor (ACD) functions combined with IP telephony in a unified solution, companies can rapidly deploy a distributed contact center infrastructure. Cisco Unified Contact Center Enterprise supports single and multisite deployments in both all-IP environments and mixed IP and time-division multiplexing (TDM) environments. It segments customers, monitors resource availability, and delivers each contact to the most appropriate resource anywhere in the enterprise or at home. The software profiles each customer contact using related data such as dialed number and calling line ID, caller-entered digits, data submitted on a Web form, and information obtained from a customer database lookup. This combination of customer and contact center data is processed through user-defined routing scripts that graphically reflect a company's business rules.

Ideal for Companies That Need these Features

Cisco Unified Contact Center Enterprise	• Single contact center solution to support agents located in multiple locations, including formal contact centers, branch offices, and home agents • Single contact center solution to support inbound, outbound, e-mail, and Web collaboration channels • A fully redundant solution

Key Features

- Cisco Unified Contact Center Enterprise offers full scalability from less than a hundred to thousands of seats; it supports multisite contact centers and customer-relationship-management (CRM) integration.
- Carrier-class, distributed fault tolerance helps ensure uninterrupted operation.
- Multichannel interaction is possible, including Web collaboration with chat and callback, e-mail, voicemail, and fax routing.
- The solution provides continuous-contact call detail records.
- The solution provides common agent and supervisor desktops across all Cisco customer-interaction-management products.
- Cisco Unified Contact Center Enterprise provides predefined and custom real-time and historical reports; real-time data is also integrated in the agent and supervisor desktops.
- Support for custom call treatment for calls in queue includes support for music in queue and custom messaging; a standard screen pop allows any caller-entered information to be forwarded to the agent.
- Cisco Unified Contact Center Enterprise supports agent-supervisor interaction through chat; agent-supervisor messages are predefined.
- The solution offers enterprise presence integration through Cisco Unified Expert Advisor and Cisco Agent Desktop to tie in or extend intelligently routed calls to knowledge workers or informal agents.

Selected Part Numbers and Ordering Information

IPCE-BUNDLE	Requires the purchase of one CCE Server license. This license entitles the user to deploy the following necessary components: (redundant) Router; (redundant) Logger; (redundant) Communications Manager Peripheral Gateway(s); (redundant) IVR Peripheral Gateway(s) for connection to Cisco Self-Service and Queuing (IVR) systems, CVP and IP-IVR (non-Cisco IVRs require third-party IVR port licenses); Administrative workstation(s); Historical database server(s); WebView Reporting server and reporting user connections; Internet Script Editor (ISE) server and ISE user connections; application gateways; (redundant) CTI server for third-party CTI connections (only for non-agent desktop application)
IPCE-SVR	Contact Center Enterprise server license

For More Information

For more information about Cisco Unified Contact Center Enterprise, visit: http://www.cisco.com/go/ipcc.

Cisco Unified Contact Center Express

Cisco Unified Contact Center Express provides easy-to-deploy, easy-to-use, highly available, and sophisticated customer interaction management for 1 to 300 agents by supporting a highly available virtual contact center with integrated self-service applications across multiple sites secured with Cisco Security Agent. All Cisco Unified Contact Center Express solutions are tightly integrated with Cisco Unified Communications Manager.

Ideal for Companies That Need these Features

Cisco Unified Contact Center Express

- Contact center-in-a-box that delivers intelligent routing, call treatment, network-to-desktop and computer telephony integration (CTI), and integrated self-service for customer contact management over an IP infrastructure
- Ability to handle e-mail and Web-based contacts and provide outbound dialing support
- Sophisticated workforce management
- Ability to integrate multiple Cisco Unified Contact Center Express systems in the cloud under the control of Cisco Unified Intelligent Contact Management, including pre- and postrouting and centralized reporting
- Redundancy with high availability

Cisco Unified Contact Center Express is a virtual contact center that is easy to deploy, configure, and manage. It is available in three different packages [Standard, Enhanced, and Premium] to help ensure the right match with your business requirements. This interactive-voice-response [IVR] self-service solution is fully integrated with contact center operations, including the ability to deploy advanced self-service technologies such as Automatic Speech Recognition (ASR) and Text to Speech (TTS).

Key Features

- Cisco Unified Contact Center Express reduces business costs while improving customer response by providing sophisticated and distributed automatic call distributor (ACD), interactive voice response (IVR), computer telephony integration (CTI), and agent and desktop services.
- The solution offers numerous sophisticated options traditionally associated with enterprise contact centers, including the ability to handle e-mail and Web-based contacts, presence integration, outbound preview dialing, and a complete workforce-management solution.
- Administration is browser-based, integrating with Cisco Unified Communications Manager browser-based administration.
- The solution provides ongoing contact call detail records.
- The standard screen allows any caller-entered information to be forwarded (through a pop) to the agent.
- The solution provides predefined or custom historical reports; real-time reports are provided within the agent and supervisor desktops.
- The solution offers high availability with automatic failover for mission-critical deployments.
- This complete, enterprise-wide, scalable unified contact center solution works in the Cisco Customer Interaction Network.
- Cisco Unified Contact Center Express fully supports agent-supervisor interaction through chat and predefined messages.
- The solution offers full IP call queue points and prompts; it collects voice interaction capabilities.
- Optional Automatic Speech Recognition (ASR) and Text-to-Speech (TTS) capabilities are available.
- The solution supports custom call treatment such as music for calls in queue.
- Offers Cisco Mobile Supervisor feature enabling supervisors to receive real-time reports on the go on their Apple iPhone or iPod Touch.

NOTE: This is an abbreviated list of Cisco Unified Contact Center features.

Selected Part Numbers and Ordering Information

IPCX-70-STANDARD	New 7.0 Standard deployment
IPCX-70-ENHANCED	New 7.0 Enhanced deployment
IPCX-70-PREMIUM	New 7.0 Premium deployment
IPCX-70-STD-ADDON	Add-ons to an existing 7.0 Standard deployment
IPCX-70-ENH-ADDON	Add-ons to an existing 7.0 Enhanced deployment
IPCX-70-PRE-ADDON	Add-ons to an existing 7.0 Premium deployment

For More Information

For more information about Cisco Unified Contact Center Express, visit: http://www.cisco.com/go/ipccexpress.

Cisco Unified Contact Center Hosted Edition

The Cisco Unified Contact Center Hosted Edition solution is suitable for both enterprise customers and service providers. For service providers, it creates a new, high-margin service revenue stream for incumbent providers as well as new service carriers. The service provider hosts the contact center infrastructure software, which is shared by multiple business customers, in its central office or data center. Subscribing business customers can have IP infrastructures, time-division multiplexing (TDM) infrastructures, or a combination of the two. For the enterprise customer with multiple branch offices or divisions, the value is a centralized contact center infrastructure with the ability to offer services to its various divisions or satellite offices.

Ideal for Companies That Need These Features

Cisco Unified Contact Center Hosted Edition	• Multiple business units that function autonomously

This solution is ideal for very large enterprise customers who want to deploy a single solution to support multiple businesses such as state government. It is also ideal for service providers that want to offer managed contact center services to their customers.

Key Features

- Cisco Unified Contact Center Hosted is a virtual call center; calls are routed to contact center agents independent of their location, a service especially appealing to businesses with branch offices or home agents.
- Network routing with a computer-telephony-integration (CTI) network-based automatic call distributor (ACD) is combined with CTI services.
- Network interactive-voice-response (IVR) functions are located in the network to provide information to callers or to collect information from callers before they speak with a live agent.
- Calls are routed between contact centers based on call-context information (dialed number and caller ID), agent availability, and customer information from databases.

Selected Part Numbers and Ordering Information

IPCH-BUNDLE	The Hosted bundle consists of two separately-licensed sets of components. The base licenses for the shared infrastructure, such as the NAM, the network interfaces, shared network IVRs, CICMs, and Hosted IPCC Agent licenses; (redundant) Router; (redundant) Logger; (redundant) Communications Manager Peripheral Gateway(s); (redundant) IVR Peripheral Gateway(s) for connection to Cisco IVR systems ISN and IP-IVR (non-Cisco IVRs require third-party IVR port licenses); Administrative workstation(s); Historical database server(s); WebView server and WebView user connections; Internet Script Editor (ISE) server and ISE user connections; application gateways; (redundant) CTI server for third-party CTI connections (only for non-agent desktop application)

For More Information

For more information about Cisco Unified Contact Center Hosted, visit: http://www.cisco.com/go/ipcchosted.

Cisco Unified Customer Voice Portal

The Cisco Unified Customer Voice Portal integrates with both traditional time-division multiplexing (TDM) and IP-based contact centers to provide an unparalleled call-management and call-treatment solution with self-service voice and a video IVR option that can use information available on the corporate web server. With support for ASR and TTS capabilities, callers can obtain personalized answers to complex questions and can

conduct business in new and innovative ways–with or without a live agent. The Unified CVP solution offers a unique capability of providing the voice processing on Cisco integrated services routers and access servers, thus allowing the same self-service application to be deployed at a retail office or at large customer call centers, thus significantly reducing customers' bandwidth usage.

Ideal for Companies That Need These Features

Cisco Unified Customer Voice Portal

- Offset high costs associated with assisted-service contact center agents by directing more customer interactions to automated voice and video self-service
- Improved effectiveness of automated voice and video self-service at lower cost by treating calls at the most effective location
- A consistent customer experience across self-service (web and phone) and assisted-service environments

Selected Part Numbers and Ordering Information

CVP-70-SERVER-SW	CVP 7.0 Server Software
CVP-STU-70-UE60	Call Studio 7.0 for CVP 7.0 and CVP Universal Edition 6.0
CVP-7X-PTS	CVP 7.X Self-Service Port License

For More Information

For more information about Cisco Unified Customer Voice Portal, visit: http://www.cisco.com/go/cvp.

Cisco Unified Expert Advisor

Cisco Unified Expert Advisor expands the scope of the contact center by allowing presence-enabled enterprise knowledge workers to handle incoming customer calls without the need for the rigid tools and business rules typically found in formal contact centers. Cisco Unified Expert Advisor can be deployed as an add-on to Cisco Contact Center solutions, or in a standalone mode without any formal contact center agents in the call flow. Experts receive precall data, allowing faster problem resolution. The solution is highly flexible and customizable, allowing enterprises to implement the most appropriate architecture and business logic to meet their customer contact needs.

Ideal for Companies That Need these Features

Cisco Unified Expert Advisor

- Formal contact centers with agents that require escalation to third- or fourth-level support or specialists in the enterprise who have the ability to improve on customer service by addressing the sought-after "first-call resolution."
- Small to medium-sized contact centers that require extension of customer calls to knowledge workers and for informal contact centers that do not process a high load of calls or where most customers address their needs from a self-service application.
- Environments where there is only a self-service or queuing application and no formal agents.

Key Features

- The solution improves first-call resolution and increases customer satisfaction by allowing subject matter experts anywhere in the enterprise to handle incoming customer calls.
- When deployed with Cisco contact center solutions, formal agents can request expert help with the click of a button.
- Agents can transfer the caller to the expert, or engage in a three-way conference with the caller and the expert.
- When deployed in standalone mode, Cisco Unified Expert Advisor provides robust, efficient customer interactions without the need for traditional contact center agents.
- Real-time and historical reports give decision makers detailed insights and control over their customer interaction flows. The solution offers higher rates of first-call resolution and reduced customer turnover.

Selected Part Numbers and Ordering Information

UNIFIED-EA-7X	Cisco Unified Expert Advisor Top Level Bundle
EA-USR-LIC=	EA Single Seat (Presence License ordered separately)
EA7X-RTS-LIC-K9=	EA 7.x Runtime Srv License (Presence License ordered separately)

For More Information

For more information about Cisco Unified Expert Advisor, visit: http://www.cisco.com/go/ea.

Cisco Unified Intelligence Suite

The Cisco Unified Intelligence Suite comprises two components: Intelligence Center and the Archiver data repository. The suite also includes advanced integration tools that help users evolve the platform into an enterprise-wide information portal.

Intelligence Center is a web-based application that provides real-time and historical reporting in an easy-to-use, wizard-based interface. The Archiver is an external Microsoft Structured Query Language (MS-SQL) data repository that adds significant scalability and flexibility to Cisco Unified Contact Center reporting. The advanced integration tools allow customers to integrate data from nontraditional contact center sources such as Really Simple Syndication (RSS) feeds, external websites, and third-party databases to further improve business efficiency and effectiveness.

Ideal for Companies That Need these Features

Cisco Unified Intelligence Suite	• Powerful web-based reporting platform that is as flexible as it is intuitive • The ability to report on the details of every contact across all channels from a single interface, regardless of the resources involved

Key Features

- Cisco Unified Intelligence Suite offers real-time and historical reporting in an easy-to-use, wizard-based interface.
- The solution offers a variety of presentation formats such as interactive grids, charts, web pages, and RSS feeds.
- Administrators can control access to features, reports, and data by granting privileges to individual users or groups of users.
- The solution offers integrated reporting for any data source, including third-party automatic call distributors (ACDs), Cisco Unified Workforce Management, customer relationship management (CRM), and QM products.
- The solution offers the ability to move between reports through hyperlinks providing drill-up, drill-down, and drill-across capabilities.
- Advanced drill-down capabilities allow customers to link multiple reports, including the ability to drill across data sources for maximum flexibility.

For More Information

For more information about the Cisco Unified Intelligence Suite, visit: http://www.cisco.com/go/cc.

Cisco Unified Intelligent Contact Management Enterprise

Through a combination of multichannel contact management, intelligent routing, and network-to-desktop computer telephony integration (CTI), the Cisco Unified Intelligent Contact Management Enterprise segments customers, monitors resource availability, and delivers each contact to the most appropriate resource anywhere in the enterprise.

The Cisco Unified Intelligent Contact Management Enterprise solution allows customers to keep their current legacy solutions in place regardless of TDM or IP voice transports, while giving them a migration path to new technologies such as VOIP, multi-channel and presence. When deployed with the Cisco Unified Customer Voice Portal, it lets customers begin to move call routing and queuing into the IP network, while leaving their existing TDM automatic call distributors (ACDs) and agents in place. Therefore, customers can decide to replace aging technologies independently, when it makes the most sense for them.

Ideal for Companies That Need These Features

Cisco Unified Intelligent Contact Management Enterprise	• Customers with existing, multi-site, single or multi vendor legacy ACD infrastructure looking for a unified call routing and CTI solution • Customers looking for a migration path from their existing TDM architecture to an IP solution • Customers who require unified routing across media types and across disparate vendor PBX and ACD solutions

Key Features

- Cisco Unified Intelligent Contact Management Enterprise offers carrier-class, distributed fault tolerance for uninterrupted operation.
- The solution provides profiles using contact-related data: dialed number and calling line ID (CLID), caller-entered digits, data submitted on a Web form, or information obtained from a customer profile database lookup. Profiles are processed with user-defined routing scripts that graphically reflect business rules. The solution routes each contact to the optimum resource anywhere in the enterprise, and delivers a unique and rich set of call-event and customer-profile data to the targeted desktop as a contact arrives, personalizing service and maximizing efficiency.

- Cisco Unified Intelligent Contact Management Enterprise gives customers the choice to interact through their phone, the web, voice over IP (VoIP), text chat, e-mail, or IM.
- The solution provides centralized management control over customer contacts, allowing users to implement a single set of business rules that uniformly address customer needs independent of contact channel or resource location.

Selected Part Numbers and Ordering Information

ICME-BUNDLE	Requires the purchase of at least one ACD PG and one ICM Agent license. Functionality included: monitor third-party ACD (call and agent); Call routing, including pre-routing from a carrier network and port-routing from an ACD; Historical database server(s); WebView server and WebView user connections; Internet Script Editor (ISE) server and ISE user connections; application, SQL, and ICM-to-ICM gateways; redundant deployment of all licensed components; Integrations through the ICM interfaces with third-party devices that are not intended for agent desktop usage; Connections to Cisco IVR systems (IP-IVR and CVP) and all related functions an ICM can perform, such as monitoring, reporting, and routing.

For More Information

For more information about Cisco Unified Intelligent Contact Management Enterprise, visit: http://www.cisco.com/go/icmee.

Cisco Unified Intelligent Contact Management Hosted

The Cisco Unified Intelligent Contact Management Hosted solution allows a service provider to quickly become a strategic business partner by hosting a broad continuum of mission-critical customer applications. With current users, its functions create new revenue opportunities while strengthening customer loyalty.

Ideal for Companies That Need These Features

Cisco Unified Intelligent Contact Management Hosted

- Open architecture facilitates a smooth migration from circuit-switched to packet-based voice technology while facilitating business-to-business services, e-commerce, and multimedia applications such as Web collaboration and e-mail response management, all transparent to the end user.
- Ability to deliver critical applications tailored to each customer's business strategy, and to sharply differentiate from competitors, making it easier to gain entry and obtain feature or transport revenue (for the service provider)
- Services to take advantage of value-added service provider capabilities to meet business goals (for the customer)

This solution benefits the service provider and the customer as well.

Key Features

- From this virtual call center, calls are routed to contact center agents independent of their location, a service especially appealing to businesses with branch offices or home agents.
- A network-based automatic call distributor (ACD) is combined with computer-telephony-integration (CTI) services.
- Network interactive-voice-response (IVR) functions are located in the network to provide information to callers or to collect information from callers before they speak with a live agent.
- Calls are routed between contact centers based on call-context information (dialed number and caller ID), agent availability, and customer information from databases.

Selected Part Numbers and Ordering Information

HOSTED-BUNDLE	Consists of two separately-licensed sets of components. The base licenses for the shared infrastructure, such as the NAM and the network interfaces. This is an "a la carte" licensing model; a customized system can be licensed by selecting the required volume and options The software licenses for dedicated customer components such as the ICM instances, peripheral gateway, agents, and so on. These are ACD PG and Agent licenses.

For More Information

For more information about Cisco Unified Intelligent Contact Management Hosted, visit: http://www.cisco.com/en/US/products/sw/custcosw/ps1973/index.html.

Cisco Unified Workspace Licensing

Cisco Unified Workspace Licensing allows organizations to cost-effectively access a wide range of Cisco Unified Communications applications and services in a cost effective, simple package. It includes client and server software, licensing, service and support, and software subscription on a per-user basis.

Cisco Unified Workspace Licensing is available in four versions to meet a variety of customer needs:

- Business Edition— Built on the Cisco Unified Communications Manager Business Edition platform, this edition offers call control, voice messaging, unified clients, mobility, and presence in a package optimized to the need of smaller businesses.
- Entry Edition—This edition provides basic dial tone and mobility features.
- Standard Edition—This edition provides the same benefits as Business Edition, but is optimized for larger businesses.
- Professional Edition—This edition includes all features in Standard Edition plus mobile communicator client, audio, video and web conferencing, and other advanced capabilities.

Ideal for Companies That Need these Features

Cisco Unified Workspace Licensing

- Complete, media-rich unified communications experience for all their users across their workspace
- Flexibly deploy UC applications as their evolving business needs dictate
- Timely access to Cisco's latest software updates for major, minor, and maintenance releases, as well as online tools and communities that help solve issues quickly.
- Offer workspace applications at a more affordable initial cost of acquisition
- A simplified way to purchase and manage licensing, service and support

Specifications

Function	Included in Cisco Unified Workspace Licensing	Business Edition	Entry Edition	Standard Edition	Professional Edition
Video conferencing	Cisco Unified MeetingPlace Express or Cisco Unified MeetingPlace	No	No	No	Yes
Audio conferencing	Cisco Unified MeetingPlace or Cisco Unified MeetingPlace Express solution	No	No	No	Yes
Mobile phone client	Cisco Unified Mobile Communicator Client	No	No	No	Yes
Presence	Cisco Unified Presence Profile	Yes	No	Yes	Yes
Mobility (with Sim ring services)	Cisco Unified Mobility Profile	Yes	Yes	Yes	Yes
Soft client	Cisco Unified Personal Communicator or Cisco Unified IP Communicator with Cisco Unified Video Advantage	Yes	Yes, Cisco IP Communicator only	Yes	Yes
Messaging	Cisco Unity or Cisco Unity Connection solution	Cisco Unity Connection only	No	Yes	Yes

Phone and call control	License for one or unlimited number of Cisco IP phones per user	One	One	One	Unlimited
Call control	Starting platform	Cisco Unified Communications Manager Business Edition Workspace Bundle	Cisco Unified Communications Manager	Cisco Unified Communications Manager	Cisco Unified Communications Manager
User count	Supported user counts	50–500	100+	100+	100+

Selected Part Numbers and Ordering Information

Product Number	Description	UCSS Product Number	Product Number
LIC-UWL-ENTRY	Unified Workspace Licensing Entry, 1 User	UCSS-UWL-ENTRY	CON-ESW-UWLET1 CON-ESW-UWLET1K CON-ESW-UWLET10K
LIC-UWL-PRO	Unified Workspace Licensing PRO, 1 User	UCSS-UWL-PRO	CON-ESW-PRO1 CON-ESW-PRO1K CON-ESW-PRO10K
LIC-UWL-STD	Unified Workspace Licensing STD, 1 User	UCSS-UWL-STD	CON-ESW-UWLST1 CON-ESW-UWLST1K CON-ESW-UWLST10K

For More Information

For more information about Cisco Unified Workspace Licensing, visit: http://www.cisco.com/go/cuwl.

Cisco Unified Communications Software Subscription

Cisco Unified Communications Software Subscription is a product offering that allows you to purchase major software version upgrades of various Cisco Unified Communications products at a reduced cost. You are able to:

- Stay up-to-date—Get the latest product enhancements whenever there is a Cisco Unified Communications major software release, at no additional charge.
- Stay protected—During the term of your subscription agreement, you have guaranteed access to new software upgrades.
- Stay cost-effective—Whether you purchase a 1-, 2-, 3-, or 5-year subscription plan, Cisco Unified Communications Software Subscription can help you plan for the future while saving you money compared to repeat purchases of new software or individual upgrades.
- Stay productive—The process of planning, buying, deploying, and maintaining your Cisco Unified Communications upgrades is much easier and faster.

When combined with Cisco Unified Communications Essential Operate Service, you have timely access to Cisco's latest software updates for major, minor, and maintenance releases, as well as online tools and communities that help solve issues quickly.

Ideal for Companies That Need these Features

Cisco Unified Communications Software Subscription	• Maximizing return on investment and lower total ownership costs • Keeping pace with technology advancements and enhance productivity • Protecting Cisco Unified Communications investment in the future, regardless of what happens • Predicting and planning IP communications budgets over multiple years or budget only once

Selected Part Numbers and Ordering Information

Order UCSS under CUWL-LIC	Cisco Unified Communications Software Subscription for Cisco Unified Workspace Licensing
UCSS-UCM	Cisco Unified Communications Software Subscription for Cisco Unified Communications Manager
UCSS-CUCM-BE	Cisco Unified Communications Software Subscription for Cisco Unified Communications Manager Business Edition

UCSS-UNITY	Cisco Unified Communications Software Subscription for Cisco Unity
UCSS-UNITYCN	Cisco Unified Communications Software Subscription for Cisco Unity Connection
UCSS-MTPLACE	Cisco Unified Communications Software Subscription for Cisco Unified MeetingPlace
UCSS-MPE	Cisco Unified Communications Software Subscription for Cisco Unified MeetingPlace Express and Cisco Unified MeetingPlace Express VT
UCSS-CCE	Cisco Unified Communications Software Subscription for Cisco Unified Contact Center Enterprise
UCSS-CCX	Cisco Unified Communications Software Subscription for Cisco Unified Contact Center Express
UCSS-CCH	Cisco Unified Communications Software Subscription for Cisco Unified Contact Center Hosted
UCSS-CUP	Cisco Unified Communications Software Subscription for Cisco Unified Presence
UCSS-UPC	Cisco Unified Communications Software Subscription for Cisco Unified Personal Communicator
UCSS-CUMC	Cisco Unified Communications Software Subscription Cisco Unified Mobile Communicator
UCSS-ICME	Cisco Unified Communications Software Subscription for Intelligent Contact Management Enterprise
UCSS-IPIVR	Cisco Unified Communications Software Subscription for IP Interactive Voice Response (IP IVR)
UCSS-ER	Cisco Unified Communications Software Subscription for Emergency Responder

For More Information

For more information about Cisco Unified Communications Software Subscription, visit: http://www.cisco.com/go/ucss.

Cisco Unified Communications Services

Cisco and our partners offer a comprehensive portfolio of services to help protect, maintain, and optimize your Unified Communications solution.

- To find the appropriate service, visit the Service Finder tool at http://www.cisco-servicefinder.com (enter a product description or part number or search by product series family). Cisco SMARTnet support is available for all your hardware products. Cisco Essential Operate Service (ESW) is available for all your software Cisco products. The combination of hardware and software services is critical to optimizing product performance.
- For more information about Cisco Unified Communications Services, visit http://www.cisco.com/go/ucservices.
- For more information about Cisco Services, see Chapter 10, "Cisco Services."

Video

Cisco TelePresence System

Critical to delivering the Cisco TelePresence experience are three critical principles: quality that is as good as being there, a system that is extremely simple to use, and an architecture that uses existing services to provide a low total cost of ownership. The Cisco TelePresence solution gives users the tools to cost-effectively improve productivity; gain closer ties to customers, partners, and suppliers; and promote internal collaboration.

Designed to deliver an immersive "in-person" experience, the Cisco TelePresence solution incorporates high-quality spatial audio and lifelike video in a specially tuned environment. The full-duplex audio and near-zero latency allow you to communicate in real time, catching every comment and every nuance of the conversation. The industry-leading, 1080p high-definition video makes every expression and every gesture clearly visible, whether you are meeting across town or across time zones. You can now collaborate globally, not compromise on communications.

The Cisco TelePresence solution is designed to take advantage of the tools you use every day. It integrates with both enterprise groupware and unified communications, so scheduling a Cisco TelePresence meeting is as simple as booking a meeting. Whether you are meeting with one or many sites, the simple and intuitive user interface eliminates the need for staff, training, or manuals so that you can focus on the business opportunity—

not the technology. And thanks to the simplicity and reliability of this solution, you can focus your IT resources on strategic projects instead of operational tasks.

The Cisco TelePresence solution delivers the industry's leading in-room experience, so users can conduct business as easily and naturally as in person, but more cost-effectively. The solution offers intercompany capabilities for secure face-to-face communications across enterprise networks, interoperability with standards-based video conferencing, and scalable, cost-effective multipoint capabilities with support for up to 48 sites in a single meeting.

The Cisco TelePresence solution uses intelligent network architecture, with innovative services and integrated security—and industry-leading reliability. It takes advantage of the real-time collaborative communications services built into the network, delivering quality of service, security, and high availability. You can deploy and scale the application quickly, with a low total cost of ownership, for immediate productivity gains. Your organization can depend on this solution as a strategic communications platform that provides an in-person experience with the quality, simplicity, and reliability of a telephone call.

Key Features

- The solution is available as an entire portfolio of rooms and endpoints in a variety of configurations to meet all meeting and collaboration needs, from one-on-one meetings to very large team meetings or classroom applications.
- The solution is simple to use and it integrates with Microsoft Outlook and Lotus Notes for one-button-to-push meeting initiation.
- Meeting participants can share documents, photos, video, and physical objects through Cisco TelePresence Auto-Collaboration.
- Cisco TelePresence systems can participate in multipoint meetings by using the Cisco TelePresence Multipoint Switch.
- The Cisco TelePresence solution provides comprehensive security through media and signaling encryption for point-to-point and multipoint calls. Built-in encryption maintains the immersive meeting experience without adding discernable latency.
- Participants can meet with other organizations through intercompany Cisco TelePresence meetings.
- The solution interoperates with existing, standards-based video conferencing equipment.
- The Cisco TelePresence environment incorporates advanced audio, high-quality video, and room environmentals.

Cisco TelePresence System 500

The Cisco TelePresence System 500 brings the virtual in-person experience of Cisco TelePresence meetings directly into the private office. Creating a new category called Cisco TelePresence, the Cisco TelePresence System 500 allows individuals, subject matter experts, and executives to join Cisco TelePresence calls with equal stature—appearing life-size on Cisco TelePresence System 3000 and other endpoints.

The Cisco TelePresence System 500 is ideal for joining large, multilocation group meetings, such as operational reviews, status update meetings, and quarterly customer presentations. It also supports personal meetings such as negotiations, job interviews, and personnel reviews.

Specifications

Feature	Cisco TelePresence System 500
Product compatibility	• Cisco TelePresence System 1000 with CTS software version 1.4 or later • Cisco TelePresence System 3000 with CTS software version 1.4 or later • Cisco TelePresence System 3200 with CTS software version 1.4 or later • Cisco Unified Communications Manager 6.0 or later • Cisco TelePresence Multipoint Switch 1.0 or later • Cisco TelePresence Manager 1.4 or later
Software compatibility	Cisco TelePresence System software Version 1.4 or later
Protocols	Cisco Discovery Protocol, SIP, IP, Dynamic Host Configuration Protocol (DHCP), Secure Shell (SSH) Protocol, 802.1p/q, and Real-Time Transport Protocol (RTP)
Connectivity	Ethernet (1 LAN, RJ-45 connection -- 100/1000m), internal 4-port Ethernet switch, and high-definition video connector
Programming interfaces	Web-based user interface; IP address assignment can be statically configured or configured through the Cisco TelePresence administrator Web interface

Physical dimensions (H x W x D)	Minimum room dimensions: 8 x 6 x 8 feet · Table top: Height 3'0.5", Width 3'2", Depth 1'4.5"; Base width 2'7.5", Base depth 1'4.5" · Freestanding pedestal: Height 5'6.5", Width 3'2"; Base width 2'9", Base depth 2'1" · Wall mounted pedestal: Height 5'6.5", Width 3'2"; Base width 2'9", Base depth 1'1.5" · Wall mounted: Height 2'6", Width 3'2"
Weight	230 lb with pedestal; 65 lb without pedestal and CODEC
Power	350W (3 Amps @ 120V to 1.5 Amps @ 240V); Two power plugs are required
Video and Audio Specifications	
Bandwidth consumption	3 to 4 Mbps (1080p) or 1 to 3 Mbps (720p) for IP QoS connections is recommended. Note: The bandwidth recommendations for the Cisco TelePresence System 500 are identical to those for the Cisco TelePresence System 1000.
Video standards	HM.264
Video frame rate	30 frames per second using H.264
Data and graphics frame rate	· Graphics sharing at 5 frames per second (standard configuration) · Optional graphics sharing at 30 frames per second using a dedicated presentation codec
Native National Television Standards Committee (NTSC)	720p and 1080p
Resolution	1920 x 1080 Native
Audio standards	G.711 and AAC-LD (22 kHz)
Audio features	Cisco Dynamic Echo Cancellation
Cisco TelePresence high-definition camera	· Complementary Metal Oxide Semiconductor (CMOS) 2/3-inch sensor · C-mount lens · 1080p 30 · Minimum illumination 300 lux · Manual focus
H.264 interoperability	Using CIF and G.711 with CUVC35xx Series platforms
Additional Specifications	
Firmware upgrades	Downloadable from Cisco Unified Communications Manager
Video network features	Intelligent packet loss recovery of video transmission
Network interface	· 1 LAN or Ethernet (RJ-45): 100/1000 Mbps · Internal 4-port Ethernet switch with 2 PoE (IEEE 802.3af) ports on codec

Selected Part Numbers and Ordering Information

Power cords	Select the appropriate power cord pair option to plug into the wall outlets in the country where the Cisco TelePresence system will be deployed.
Auxiliary control unit	CTS-LIGHT-CTRL—This is an optional control unit that is used to turn off system lighting when not in a meeting and is not required for Cisco TelePresence 500 operation. The built-in lighting for the system is included and does not need to be ordered separately.
Presentation codec	CTS-HFR-COLLAB—This chargeable option adds a dedicated presentation codec to enable high-frame-rate Auto Collaboration.
Mounting Options (Choose one at NC)	· CTS500-STRUC-PED—This mounting option provides a free standing floor mount for the CTS-500 with codec integrated to the pedestal · CTS500-STRUC-TABL—This mounting option is for the display sitting on a table or shelf and codec sits on the floor with a cable harness · CTS500-STRUC-WALL—This mounting option is for the display attached to a wall and codec sits on the floor with a cable harness

For More Information

For more information about the Cisco TelePresence System, visit: http://www.cisco.com/go/telepresence.

Cisco TelePresence System 1000

The Cisco TelePresence System 1000 is ideal for small group or one-on-one meetings around the "virtual table". Two Cisco TelePresence System 1000 endpoints in a single meeting create a virtual table for up to 4 participants. The Cisco TelePresence System 1000 is suitable for uses such as direct customer engagements, small presentations, regular one-on-one meetings with remote employees or partners, supply-chain dealings, press briefings, operational or engineering reviews, or negotiations and interviews.

Specifications

Feature	Cisco TelePresence System 1000
Product compatibility	• Cisco TelePresence System 500 with CTS software version 1.5 or later • Cisco TelePresence System 3000 with CTS software version 1.1 or later • Cisco TelePresence System 3200 with CTS software version 1.4 or later • Cisco Unified Communications Manager 5.1 or later • Cisco TelePresence Multipoint Switch 1.0 or later • Cisco TelePresence Manager 1.4 or later
Software compatibility	Cisco TelePresence System software Version 1.2
Protocols	Cisco Discovery Protocol, SIP, IP, Dynamic Host Configuration Protocol (DHCP), Secure Shell (SSH) Protocol, 802.1p/q, and Real-Time Transport Protocol (RTP)
Connectivity	Ethernet (1 LAN, RJ-45 connection—100/1000m), internal 4-port Ethernet switch, and high-definition video connector (socket and cable)
Programming interfaces	Web-based user interface; IP address assignment can be statically configured or configured through the Cisco TelePresence Web interface
Physical dimensions (H x W x D)	61 x 62 x 14 in.; Designed for small conference room or office
Power	Maximum—1160W (9.7A @ 120V to 4.8A @ 240V); Typical—1079W (9A @ 120V to 4.5A @ 240V)
Video and Audio Specifications	
Bandwidth	1-3 Mbps (720p) or 3-4 Mbps (1080p) for IP QoS connections is recommended; on average, a Cisco TelePresence System 1000 uses 1-2 Mbps (1080p)
Video standards	H.264
Frame rates	30 frames per second using H.264
Data and graphics frame rate	Graphics sharing at 5 frames per second (standard configuration) Optional graphics sharing at 30 frames per second using a dedicated presentation codec
Native National Television Standards Committee (NTSC)	720p and 1080p
Resolution	1920 x 1080 native
Audio standards	G.711 and AAC-LD (22 kHz)
Audio features	Cisco Dynamic Echo Cancellation
Cisco TelePresence High-Definition Camera	• CMOS 2/3-in. sensor; C Mount Lens; 1080p 30; Minimum illumination 300 Lux; Manual focus
Additional Specifications	
Firmware upgrades	Downloadable from Cisco Unified Communications Manager
Dimensions (H x W x D)	61 x 62 x 14 in.
Footprint	Small conference room or executive office
Weight	690 lb (freight weight)
Video network features	Intelligent packet loss recovery of video transmission
Network interface	1 LAN or Ethernet (RJ-45); 100/1000 Mbps
Ethernet, Internet, and intranet connectivity	Cisco Discovery Protocol, 802.1p/q, TCP/IP, DHCP, and SSH

Selected Part Numbers and Ordering Information

CTS-1000	Cisco TelePresence System 1000
Power Cords	Select the appropriate power cord option to plug into the wall outlets in the country where the TelePresence system will be deployed.
Lighting Fixtures	Select the appropriate system lighting fixture based on the region where the TelePresence system will be deployed. Special lighting fixtures are required for Europe and Japan.
Auxiliary control unit	CTS-LIGHT-CTR—This is an optional control unit that is not required for Cisco TelePresence 1000 operation.
Presentation Codec	CTS-HFR-COLLA—This is a chargeable option to add a dedicated presentation codec to enable high frame rate Auto Collaboration.

For More Information

For more information about the Cisco TelePresence System, visit: http://www.cisco.com/go/telepresence.

Cisco TelePresence System 1300

The Cisco TelePresence System 1300 brings the virtual in-person Cisco TelePresence experience to the multipurpose conference room. With a streamlined industrial design, one screen, and three cameras, it can support up to six people without requiring a dedicated teleconferencing room. All team members participate life-size in Cisco TelePresence calls with automatic voice-activated switching.

The Cisco TelePresence System 1300 is ideal for multipoint group meetings, such as operational reviews, status update meetings, and quarterly customer presentations. It also supports multilocation collaborative group meetings such as design reviews, and general working sessions for geographically dispersed teams.

Specifications

Product compatibility	· Cisco TelePresence System 500 with Cisco TelePresence System Software v1.5 or later · Cisco TelePresence System 1000 with Cisco TelePresence System Software v1.5 or later · Cisco TelePresence System 3000 with Cisco TelePresence System Software v1.5 or later · Cisco TelePresence System 3200 with Cisco TelePresence System Software v1.5 or later · Cisco Unified Communications Manager 6.1 or 7.0 or later · Cisco TelePresence Multipoint Switch 1.5 or later · Cisco TelePresence Manager 1.5 or later
Software compatibility	Cisco TelePresence System Software Version 1.5 or later
Protocols	Cisco Discovery Protocol, SIP, IP, Dynamic Host Configuration Protocol (DHCP), Secure Shell (SSH) Protocol, 802.1p/q, and Real-Time Transport Protocol (RTP)
Connectivity	Ethernet (1 LAN, RJ-45 connection - 100/1000m), internal 4-port Ethernet switch, and high-definition video connector
Programming interfaces	Web-based user interface; IP address assignment can be statically configured or configured through the Cisco TelePresence administrator web interface
Physical dimensions (H x W x D)	Wall-mounted: 77.4 x 80 x 7.5 in. (196.7 x 203.2 x 19.1 cm)
Weight	600 lb (272 kg) (freight weight)
Power	Cisco TelePresence system (typical): 1228W (12.8A @ 120V)
Video and Audio Specifications	
Bandwidth consumption	Recommended for IP QoS connections: 3 to 4 Mbps (1080p) or 1 to 3 Mbps (720p) Note: The bandwidth recommendations for the Cisco TelePresence System 1300 are identical to those for the Cisco TelePresence System 1000.
Video standards	H.264
Video frame rate	30 frames per second using H.264
Data and graphics frame rate	· Graphics sharing at 5 frames per second (standard configuration) · Optional graphics sharing at 30 frames per second using a dedicated presentation codec
Native National Television Standards Committee (NTSC)	720p and 1080p

Resolution	1920 x 1080 Native
Audio standards	G.711 and AAC-LD (22 kHz)
Audio features	Cisco Dynamic Echo Cancellation
Cisco TelePresence high-definition camera	• Complementary Metal Oxide Semiconductor (CMOS) 2/3-inch sensor • C-mount lens • 1080p 30 fps • Minimum illumination 300 lux • Manual focus
H.264 interoperability	Using Common Intermediate Format (CIF) and G.711 with Cisco Unified Video Conferencing 3500 Series platforms
Additional Specifications	
Firmware upgrades	Downloadable from Cisco Unified Communications Manager
Video network features	Intelligent packet loss recovery of video transmission
Network interface	• 1 LAN or Ethernet (RJ-45); 100/1000 Mbps • Internal 4-port Ethernet switch with 2 PoE (IEEE 802.3af) ports on codec

Selected Part Numbers and Ordering Information

CTS-1300-65	**Cisco TelePresence System 1300-65**
Power Cords	Select the appropriate power cord pair option to plug into the wall outlets in the country where the Cisco TelePresence system will be deployed.
Presentation codec	CTS-HFR-COLLAB This chargeable option adds a dedicated presentation codec to enable high-frame-rate Auto Collaboration.

For More Information

For more information about the Cisco TelePresence System 1300, visit: http://www.cisco.com/go/telepresence.

Cisco TelePresence System 3000

The Cisco TelePresence System 3000 is an ideal endpoint for group meetings, creating an environment for six people to sit around the "virtual table" in a single location. Two Cisco TelePresence System 3000 systems in a meeting create a virtual table for 12 participants. The Cisco TelePresence System 3000 is suitable for uses such as customer engagements, presentations to small or large groups, supply-chain dealings, press briefings, operational or engineering reviews, negotiations, or regular team meetings.

Specifications

Feature	**Cisco TelePresence System 3000**
Product compatibility	Cisco TelePresence System 500 with CTS software version 1.5 or later; Cisco TelePresence System 1000 with CTS software version 1.1 or later; Cisco TelePresence; System 3200 with CTS software version 1.4 or later; Cisco Unified Communications Manager 5.1 or later; Cisco TelePresence Multipoint Switch 1.0 or later; Cisco TelePresence Manager 1.0 or later
Software compatibility	Cisco TelePresence System software Version 1.1 or later
Protocols	Cisco Discovery Protocol, SIP, IP, Dynamic Host Configuration Protocol (DHCP), Secure Shell (SSH) Protocol, 802.1p/q, and Real-Time Transport Protocol (RTP)
Connectivity	Ethernet (1 LAN, RJ-45 connection—100/1000m), internal 4-port Ethernet switch, and high-definition video connector
Programming interfaces	Web-based user interface; IP address assignment can be statically configured or configured through the Cisco TelePresence administrator Web interface
Physical dimensions (H x W x D)	8 x 15 x 19 feet of space is required at minimum
Weight	2020 lb (freight weight)
Power	Maximum—5292W (44.1A @ 120V to 22A @ 240V) Typical—4410W (36.8A @ 120V to 18.4A @ 240V)

Video and Audio Specifications	
Bandwidth consumption	3-9 Mbps (720p) or 9-12 Mbps (1080p) for IP QoS connections recommended; on average, a Cisco TelePresence System 3000 uses 6-8 Mbps (1080p)
Video standards	H.264
Frame rates	30 frames per second using H.264
Data and graphics frame rate	Graphics sharing at 5 frames per second (standard configuration) Optional graphics sharing at 30 frames per second using a dedicated presentation codec
Native National Television Standards Committee (NTSC)	720p and 1080p
Resolution	1920 x 1080 Native
Audio standards	G.711 and AAC-LD (22 kHz)
Cisco TelePresence High-Definition Camera	· CMOS 2/3-inch sensor · C Mount Lens · 1080p 30 · Minimum illumination 300 Lux · Manual focus
Audio features	Cisco Dynamic Echo Cancellation for spatial audio
Additional Specifications	
Firmware upgrades	Downloadable from Cisco Unified Communications Manager
Video network features	Intelligent packet loss recovery of video transmission
Network interface	1 LAN or Ethernet (RJ-45); 100/1000 Mbps; Internal 4-port Ethernet switch with 2 PoE (IEEE 802.3af) ports on codec

Selected Part Numbers and Ordering Information

CTS-3000	Cisco TelePresence System 3000
Power Cords	Select the appropriate power cord option to plug into the wall outlets in the country where the TelePresence system will be deployed.
Laptop Connectivity Modules	Select the appropriate connectivity modules based on the country where the TelePresence system will be deployed. These modules allow participants to plug their laptop PC's or other portable electronic devices into power outlets integrated into the system table legs.
Lighting Fixtures	Select the appropriate system lighting fixture based on the region where the TelePresence system will be deployed. Special lighting fixtures are required for Europe and Japan.
Auxiliary control unit	CTS-LIGHT-CTR—This is an optional control unit that is not required for Cisco TelePresence System 3000 operation.
Projectors	Projector options are offered to meet country specific regulatory requirements. Select from standard, Chinese or none.
Presentation Codec	CTS-HFR-COLLAB—This is a chargeable option to add a dedicated presentation codec to enable high frame rate Auto Collaboration.

For More Information

For more information about the Cisco TelePresence System, visit: http://www.cisco.com/go/telepresence.

Cisco TelePresence System 3200

For large, distributed organizations striving to thrive and grow in today's global virtual economy, the Cisco TelePresence System 3200 brings the power of Cisco TelePresence technology to larger room venues. Ideal for headquarters sites or large regional offices, the system allows large teams to meet and collaborate virtually using the Cisco TelePresence solution when much of the team is in one physical location. With seating for up to 18 participants in a single room, the system delivers the same superior video and audio quality as the rest of the Cisco TelePresence portfolio. Applications for the Cisco TelePresence 3200 include large team meetings, cross-functional team meetings, and training or classroom events. The solution can now scale to fit your organization's wide range of meeting needs today and into the future.

The Cisco TelePresence 3200 is ideal for large group meetings with many participants in a single location, connecting to other satellite groups in remote locations. It provides an equal seat at the table for participants for applications such as operations reviews, status update meetings, quarterly meetings with clients or partners, executive presentations, or meetings requiring staff to be present.

Specifications

Feature	Cisco TelePresence System 3200
Product compatibility	· Cisco TelePresence System 500 with Cisco TelePresence System software 1.4 or later · Cisco TelePresence System 1000 with Cisco TelePresence System software 1.2 or later · Cisco TelePresence System 3000 with Cisco TelePresence System software 1.2 or later · Cisco Unified Communications Manager 6.0 or later · Cisco TelePresence Multipoint Switch 1.0 or later · Cisco TelePresence Manager 1.4 or later
Software compatibility	Cisco TelePresence System Software 1.4 or later
Protocols	Cisco Discovery Protocol, SIP, IP, Dynamic Host Configuration Protocol (DHCP), Secure Shell (SSH) Protocol, 802.1p/q, and Real-Time Transport Protocol (RTP)
Connectivity	Ethernet (1 LAN, RJ-45 connection—100/1000m), internal 4-port Ethernet switch, and high-definition video connector
Programming interfaces	Web-based user interface; you can configure IP address assignment statically or through the Cisco TelePresence administrator Web interface
Physical dimensions (H x W x D)	8 x 24 x 23 feet minimum room dimensions for reduced back-row table configuration (total room capacity of 14 participants). Dimensions for the 12-person second row table are 8 x 31 x 23 feet. Note that higher ceilings may be required to mount an optional data display. Contact your Cisco Authorized Technology Provider (ATP) partner for data display options and mounting options.
Weight	Approximately 2595 lb (1177 kg; freight weight)
Power	8856 W (73.8 A @ 120V to 36.9 A @ 240V maximum)
Video and Audio Specifications	
Bandwidth consumption	15.3 Mbps (1080p, best motion handling) or 11.7 Mbps (720p, best motion handling) for IP QoS connections recommended 19.8Mbs (1080p best) or 16.2Mbs (720p best) when including at 30 fps presentation codec. Note that the bandwidth recommendations for the Cisco TelePresence 3200 are identical to those for the Cisco TelePresence 3000.
Video standards	H.264
Video frame rate	30 frames per second using H.264
Data and graphics frame rate	Graphics sharing at 5 frames per second (standard configuration) Optional graphics sharing at 30 frames per second using a dedicated presentation codec
Native National Television Standards Committee (NTSC)	720p and 1080p
Resolution	1920 x 1080 native
Audio standards	G.711 and AAC-LD (22 kHz)
Audio features	Cisco Dynamic Echo Cancellation for spatial audio
Cisco TelePresence High-Definition Camera	· CMOS 2/3-inch sensor · C Mount Lens · 1080p 30 · Minimum illumination 300 Lux · Manual focus
Additional Specifications	
Firmware upgrades	Downloadable from Cisco Unified Communications Manager
Video network features	Intelligent packet loss recovery of video transmission
Network interface	· 1 LAN or Ethernet (RJ-45); 100/1000 Mbps · Internal 4-port Ethernet switch with 2 PoE (IEEE 802.3af) ports on codec

Selected Part Numbers and Ordering Information

Power Cords	Select the appropriate power cord option to plug into the wall outlets in the country where the TelePresence system will be deployed.
Laptop Connectivity Modules	Select the appropriate connectivity modules based on the country where the TelePresence system will be deployed. These modules allow participants to plug their laptop PC's or other portable electronic devices into power outlets integrated into the system table legs.
Lighting Fixtures	Select the appropriate system lighting fixture based on the region where the TelePresence system will be deployed. Special lighting fixtures are required for Europe and Japan.
Projectors	Projector options are offered to meet country specific regulatory requirements. Select from standard, Chinese or none.
Presentation Codec	CTS-HFR-COLLAB This is a chargeable option to add a dedicated presentation codec to enable high frame rate Auto Collaboration.

For More Information

For more information about the Cisco TelePresence System, visit: http://www.cisco.com/go/telepresence.

Cisco TelePresence Manager

Cisco TelePresence Manager software makes it easy for you to schedule and manage Cisco TelePresence calls. As an integral part of the Cisco TelePresence experience, the software facilitates call scheduling and setup from common enterprise groupware such as Microsoft Exchange and Lotus Notes.

Key Features

- Web-based user interface for easy administration
- Easy scheduling to minimize user training and support
- Ability to launch calls with one button on the phone interface
- Microsoft Exchange and Lotus Notes compatibility
- Integration with Cisco Unified Call Manager for call control
- Optimized resource allocation for multipoint calls
- Consolidated views of scheduled meetings with export functions for ROI reporting

Specifications

Feature	Cisco TelePresence Manager
Product compatibility	Cisco MCS 7835-H2 and MCS 7835-I2 Media Convergence Servers
Software compatibility	Microsoft Internet Explorer 6.0
Protocols	HTTP, HTTPS, Cisco AVVID XML Layer (AXL) with SOAP, Simple Network Management Protocol (SNMP), and CTI
Connectivity	IP
Reliability and availability	High availability through Cisco MCS 7835 Media Convergence Server platform

Selected Part Numbers and Ordering Information

CTS-MAN1.3	Cisco TelePresence Manager 1.3[1]
MCS-7835-H2-CTS1	Cisco MCS 7835-H2 Media Convergence Server
MCS-7835-I2-CTS1	Cisco MCS 7835-I2 Media Convergence Server[2]
LIC-CTS-MAN-MS	Cisco TelePresence Manager Integration for MS Exchange
LIC-CTS-MAN-IBM	Cisco TelePresence Manager Integration for IBM Domino[3]
LIC-CTS-MAN-10	Cisco TelePresence Manager Device License: 10 units
LIC-CTS-MAN-50	Cisco TelePresence Manager Device License: 50 units
LIC-CTS-MAN-100	Cisco TelePresence Manager Device License:100 units

1. One Cisco media convergence server is required per Cisco TelePresence Manager implementation.
2. One integration is required per Cisco TelePresence Manager Implementation.

3.License required. Based on number of Cisco TelePresence systems under management.

For More Information

For more information about the Cisco TelePresence System, visit: http://www.cisco.com/go/telepresence.

Cisco TelePresence Multipoint Switch

Easily and reliably include three or more locations in a single meeting with the Cisco TelePresence Multipoint Switch. With support for up to 48 locations in a single meeting across many endpoints, the switch allows all participants to be seen in life-like, high-definition video and heard in CD-quality, spatial audio with no perceivable latency. The Cisco TelePresence Multipoint Switch is an affordable, purpose-built appliance that offers superior scalability and is easy to install. It delivers automatic voice-activated switching either site-by-site or by individual table segment.

Key Features

- Easy meeting setup through enterprise groupware such as Microsoft Outlook or Lotus Notes
- One-button-to-push meeting start with the in-room IP phone
- The system supports connections among 48 single-screen Cisco TelePresence 500 or Cisco TelePresence 1000 endpoints, 16 triple-screen Cisco TelePresence 3000 or Cisco TelePresence 3200 endpoints, or a mix of both in a single meeting.
- Voice-activated switching with spatial audio and seating location on screen maintained as switching occurs
- When linked with the Cisco Unified Video Conferencing 3515 or 3545 MCU, the Cisco TelePresence Multipoint Switch provides full interoperability with the installed base of H.323 and SIP (Session Initiation Protocol) video conferencing endpoints.
- Latency of less than 10 milliseconds for transparent switching between sites or segments during a multipoint call
- Data sharing and auto-collaboration to share images with all other participants and rooms
- Web-based administration with role-based profiles for administrators at both group and department levels

Specifications

Feature	Cisco TelePresence Multipoint Switch	Cisco TelePresence Interoperability
Product compatibility	Cisco TelePresence System Version 1.4.2 or later	
Software compatibility	Cisco TelePresence Manager Version 1.5 or later	
Call signaling	SIP trunk with Cisco Unified Communications Manager Version 6.1.3 or later and IP Version 4 (IPv4)	
Media protocol	Real-Time Control Protocol (RTCP) and Real-Time Transport Protocol (RTP), User Datagram Protocol (UDP), and IP Unicast	
Video protocol	H.264 baseline high-definition (HDTV) 16:9 aspect ratio	H.264 baseline standard definition (TV) 4:3 aspect ratio (on demand only)
Video resolution	Progressive 1080p (1920 x 1080 pixels at 30 frames per second [fps]) and 720p (1280 x 720 pixels at 30 fps)	Common Interchange Format (CIF), 352 x 288 pixels at 30 fps)
Auto collaboration video	1024 x 768 pixels at 5 fps or 30fps presentation video	Not supported in current release
Audio	Advanced Audio Coding with low delay (AAC-LD/HBR) 22-MHz (CD-quality) audio; 4 channel audio streams	Full toll-quality G.711 single channel audio (4 channels mixed)
Additional hardware	No additional hardware required	At least 1 Cisco Unified Videoconferencing 3500 MCU (model 3515/12, 3515/24, or 3545)

Cisco TelePresence Attribute	
Capacity	Up to 48 1080p 30-fps video streams
Maximum meeting size	A single multipoint meeting can accommodate up to the total capacity of the system, which supports 48 video streams (1 plasma display = 1 video stream), so 16 Cisco TelePresence System 3000 endpoints or Cisco TelePresence System 3200, 48 Cisco TelePresence System 1000 endpoints or Cisco TelePresence System 500, or a mix can participate in a single meeting.

Concurrent meetings	The total capacity of CTMS is 48 simultaneous video streams, with each plasma display representing one video stream. This capacity can be divided into any number of meetings. For example, with three Cisco TelePresence System 1000 endpoints per meeting, the switch supports 16 concurrent meetings. The maximum number of concurrent meetings (with at least 2 Cisco TelePresence System 500 or Cisco TelePresence System 1000 endpoints) is 24.
Latency (added by Cisco TelePresence Multipoint Switch)	Less then 10 milliseconds (ms)
Jitter (added by Cisco TelePresence Multipoint Switch)	Less then 0.05%
Availability	99.99% (estimated)
SNMP MIBs	RFC 1213, ENTITY, IF, ENTITY-FRU-CONTROL, HOSTRESOURCES, UMSEVENT, UMSLMSSENSOR, and CiscoTelePresenceCall MIB
CDR data	CDR ASCII format
Administrative interface	HTTP and HTTPS, Secure Shell (SSH) Protocol, role-based access control (RBAC), and password protection
API (Application Programming Interface)	SOAP/XML for real-time (active meeting) conference and participant management
QoS	Support for Differentiated Services (DiffServ) markings

Selected Part Numbers and Ordering Information

CTS-CTMS-1.5	Cisco TelePresence Multipoint Switch (CTMS)
LIC-CTMS-1.5 (Included)	Cisco CTMS Software License/Application
MCS-7845-H2-CTS2 (Included – standard)	Cisco MCS 7845-H2 Media Convergence Server (HP)
MCS-7845-I2-CTS2 (Included – alternate)	Cisco MCS 7845-I2 Media Convergence Server (IBM)

For More Information

For more information about the Cisco TelePresence System, visit: http://www.cisco.com/go/telepresence.

Cisco TelePresence Recording Server

The Cisco TelePresence Recording Server transforms Cisco TelePresence into a high-definition recording studio. Using an intuitive user interface, you can create high-quality video to deliver rich, immersive messages immediately for internal and external communications such as training or crisis management. Distributing and viewing video content is easy, and you can replay recordings on Cisco TelePresence endpoints or on the web on standard browser-based players.

Key Features

- High-definition recording—Videos are recorded in H.264 1080p high definition for playback on any Cisco TelePresence system. You can immediately view recorded content or share recorded content with other users of Cisco TelePresence endpoints.
- Standard-definition (SD) recording—Videos are simultaneously recorded in standard definition for playback on standard browser-based video players such as Adobe Flash or Apple QuickTime.
- Autocollaboration support—You can record videos with full data presentations using the Cisco TelePresence Auto Collaborate channel to capture the PC presentation as a separate video stream. You can then play this stream back in concert with the high-definition video and audio to provide a fully synchronized presentation that is viewable with standard PC browser-based viewers.
- Easy-to-use controls—All user controls for the Cisco TelePresence Recording Server are incorporated into the Cisco TelePresence IP Phone interface. You can start, stop, pause, and play back recordings as well as sharing them through email messages.
- Onscreen prompting—You are prompted onscreen during the recording session with features such as self-view and data presentation displayed on the main monitor, allowing you to maintain eye contact with your virtual audience.
- Public and private recordings—Videos can be public or private. For private recordings you must enter a security PIN, similar to voicemail, in order to create and view these recordings. You can share private recordings with people who would also be required to authenticate themselves before accessing the recording.

- Multiresolution recording
- Synchronized data recording
- Security

Specifications

Feature	Cisco TelePresence Recording Server
Product compatibility	Cisco TelePresence Version 1.5.1 or later
Software compatibility	Cisco TelePresence System Software Version 1.5.1 or later
Call signaling	Session Initiation Protocol (SIP) trunk with Cisco® Unified Communications Manager Version 7.0 or later and IP Version 4 (IPv4)
Media protocol	Real-Time Control Protocol (RTCP) and Real-Time Transport Protocol (RTP), User Datagram Protocol (UDP), and IP Unicast
Video protocols	H.264 (MPEG 4 Part 10)
Audio protocols	AAC-LD, AAC-LC, G.711, and G.722
Video resolution	CIF, 720p, and 1080
Session capacity	Up to 24 simultaneous 1080p recording or playback sessions
Storage capacity	Up to 300 hours of 1080p and CIF recordings
Streaming video	Support for HTTP streaming of recorded content using Adobe Flash
Security features	• Integration with Active Directory through Lightweight Directory Access Protocol (LDAP) for access • Secure management through HTTPS • Password-protected conferences
System Hardware Specifications	**Cisco MCS 7845 Media Convergence Server[1]**
Hardware	Cisco MCS 7845 (Cisco MCS 7845-H2 for HP or Cisco MCS 7845-I2 for IBM) quad-core-processor server; Restriction of Hazardous Substances (RoHS)-compliant
Connectivity	Dual 1-Gb Ethernet network interfaces
Power	100 to 132 VAC (10A) and 200 to 240 VAC (6.1A); 50 to 60 Hz
Reliability	30,000 hours mean time between failure (MTBF) (estimated)
Dimensions (H x W x D)	3.38 x 17.54 x 26.01 in. (8.59 x 44.54 x 66.07 cm)
Weight	60 lb (27.22 kg)
OS software	Red Hat Linux AS 3
Origin	Manufactured in United States
Hardware data sheet	http://www.cisco.com/en/US/prod/collateral/voicesw/ps6790/ps5748/ps378/product_data_sheet0900aecd80587390.html

1. For a description of the Cisco MCS 7800 Series Media Convergence Servers, see 4–14.

Selected Part Numbers and Ordering Information

CTS-CTRS-1.6-K9	Cisco TelePresence Recording Server
LIC-CTS-CTRS-1.6	Cisco CTRS Software License/Application
MCS-7845-H2-CTRS	Cisco MCS 7845-H2 Media Convergence Server (HP)
MCS-7845-I2-CTRS	Cisco MCS 7845-I2 Media Convergence Server (IBM)

For More Information

For more information about the Cisco TelePresence Recording Server, visit: http://www.cisco.com/go/telepresence.

Cisco TelePresence Services

Critical to delivering the innovative Cisco TelePresence experience are integrated services delivered by our certified partners and Cisco. Designed specifically for multi-site organizations, these services accelerate a successful deployment and deliver a high-quality, reliable, "in-person" Cisco TelePresence experience.

For More Information

For more information on Cisco TelePresence Services, visit: http://www.cisco.com/go/telepresenceservices.

Cisco Unified Video Advantage

Cisco Unified Video Advantage (formerly Cisco VT Advantage) adds video to your communications experience by providing video telephony functions to Cisco Unified IP Phones (Cisco Unified IP Phones 7900 Series and Cisco IP Communicator softphone application). With Cisco Unified Video Advantage, video telephony is now just a phone call.

This solution comprises Cisco Unified Video Advantage software and Cisco VT Camera II, a video telephony USB camera. With Cisco Unified Video Advantage, you can use the familiar phone interface to make and receive video calls on your Cisco Unified IP Phone with the video component displayed on your PC. Enterprise organizations can take advantage of their existing IP networks to extend video to everyone in their organization.

Ideal for Companies That Need These Features

Cisco Unified Video Advantage

- Desktop video calling
- High-quality video with rich telephony features on their PC
- Transparent integration with desktop IP phone or Cisco IP Communicator for familiar phone interface

Key Features

- Consistent voice and video user experience: Cisco Unified Video Advantage offers easy, low-cost, high-quality video calling. Familiar call features such as call forward, transfer, conference, hold, and mute are initiated through the phone, and available video is viewed through the PC.
- Easy to manage: Unified administration is possible with Cisco Unified IP Phones and automatic software upgrades.

Selected Part Numbers and Ordering Information

CUVA-V2=	Cisco Unified Video Advantage with VT Camera II
CUVA-V2-24BUN=	Cisco Unified Video Advantage and VT Camera II 24-Unit Pack
CUVA-SW-2.X	Cisco Unified Video Advantage 2.x Software Only
CUVA-SW-2.X-10=	Cisco Unified Video Advantage 2.x Software 10-User License

For More Information

For more information about Cisco Unified Video Advantage, visit: http://www.cisco.com/en/US/products/sw/voicesw/ps5662/.

Cisco Unified Videoconferencing 3500 Series

Cisco Unified Videoconferencing is a video infrastructure solution for Cisco Unified Communications. The solution allows participants to collaborate effectively and share information in real time to help organizations eliminate the barriers of time, distance, and resources and permit people around the world to function as if they were in the same room. The solution supports multiple protocols to facilitate connectivity with a wide variety of video-enabled devices from desktop video telephony to standard-definition and high-definition room systems, WebEx Meeting Center, and Cisco TelePresence systems.

Key Features

- Multiprotocol support–broad video interoperability—The Cisco Unified Videoconferencing 3500 Series supports multiple standards, codecs, and protocols, including H.323, Session Initiation Protocol (SIP), Skinny Client Control Protocol (SCCP), and H.320, to help ensure broad connectivity with traditional and emerging video environments, including traditional room and desktop video conferencing systems, newer high-definition (HD) video solutions, Cisco TelePresence solutions, and Cisco Unified Communications Manager video telephony environments.
- High-performance, flexible solution—The Cisco Unified Videoconferencing 3500 Series offers an optimized experience for everyone. Its powerful hardware design has flexible processing capabilities to provide an exceptional user experience that is also scalable and cost-effective.

- High-definition (HD) conferencing—The Cisco Unified Videoconferencing 3545 System fully supports standards-based HD video conferencing endpoints.
- High-quality standard-definition video conferencing—Because every port has dedicated audio and video encoders, standard-definition (SD) endpoints can connect to any conference, at any supported bit rate, with any supported audio or video codec, at any supported SD resolution, and with any screen layout.
- High-capacity standard-definition video conferencing—The Cisco Unified Videoconferencing 3545 System has the flexibility to distribute processing resources that are not being fully used by personal or desktop video conferencing endpoints.
- Cisco Unified Videoconferencing desktop video has been integrated with Cisco WebEx™ Meeting Center to provide more advanced video capabilities for WebEx® meetings.
- The solution enhances the collaboration capabilities of Microsoft Office Communications (MOC) and Sametime by adding embedded, multiparty video. MOC and Sametime users can now initiate impromptu video communications with other MOC and Sametime users or with any video solution that can connect to Cisco Unified Videoconferencing.
- The Cisco Unified Videoconferencing ISDN Gateway Modules allow ISDN H.320 endpoints to participate in the same conferences as IP-based H.323, Skinny Client Control Protocol (SCCP), or Session Initiation Protocol (SIP) endpoints.
- Advanced solution management, desktop video, and streaming media–Cisco Unified Videoconferencing Manager—Cisco Unified Videoconferencing Systems can be managed as standalone devices or with the Cisco Unified Videoconferencing Manager, which helps organizations of all sizes use their video conferencing resources more effectively.

Specifications

Feature	Cisco Unified Videoconferencing 3500 Series
Video Capabilities	Video codecs—H.261, H.263, and H.264; Live video resolutions—Quarter Common Intermediate Format (QCIF), Common Intermediate Format (CIF), Standard Input Format (SIF), 4CIF, 1280 x 720p, and 1920 x 1080p (switched HD service only); Presentation video resolutions—Video Graphics Array (VGA), Super Video Graphics Array (SVGA), and Extended Graphics Array (XGA); Video bandwidth—Up to 2 Mbps per port; Full transcoding and transrating for all SD (up to and including 4CIF) video codecs and speeds on all ports; All-continuous-presence layout options support both SD and HD participants (for HD service); 4CIF resolution on all ports for all layout combinations; H.264 codec on all ports for all layout combinations; QualiVision for highly improved, standards-based video quality in networks with packet loss; supports both SD and HD connections; QoS support with Differentiated Services (DiffServ), type of service (ToS), and IP Precedence; Per-user (rather than per-conference) video processing, allowing unique and optimal video settings for each user
Audio Capabilities	SD audio codecs—G.711, G.722, G.722.1, G.723.1, G.728, and G.729A; DTMF tone detection (in-band, H.245 tones, and RFC 2833); Entry and exit sounds played when conference participants join or leave a conference; Ability to record and upload custom messages; Full transcoding and mixing on all audio ports
Signaling Protocols	H.323; SCCP; SIP; H.320 with gateway modules
Security	H.235 Advanced Encryption Standard (AES) and Data Encryption Standard (DES) encryption on both SD and HD connections, up to 128-bit keys, for secure audiovisual conferencing; Password-protected web GUI user access with multiple levels; administrator, operator, and user; Strong password enforcement; HTTPS and Secure Sockets Layer (SSL); PIN-protected conferences to help ensure privacy; Security warning page option; Serial port disable and enable; Session inactivity time-out and user lockout (manual and auto) capabilities; Security event logging
Feature	**Cisco Unified Videoconferencing 3545 System**
LAN Interface	One 10/100 Ethernet port, IEEE 802.3, 8-pin RJ-45 on each console
Serial Port	EIA-232, 9-pin D-type
Dimensions	3.50 x 17.25 x 10.0 in. (8.89 x 438.15 x 25.4 cm)
Weight	17.6 lb (8 kg) for empty chassis (with two power supplies)
Power	100-240 VAC autosense, 50–60 Hz, 202W maximum; Dual redundant power supplies; U.S. power cable included; Other power cables available
Environment	Operating temperature—32 to 122°F (0 to 50°C); Storage temperature—13 to 158°F (25 to 70°C); Humidity to 5 to 90% noncondensing

For More Information

For more information about the Cisco Unified Videoconferencing 3500 Series, visit: http://www.cisco.com/go/ipvc.

WebEx

Cisco WebEx Meeting Center

Cisco WebEx Meeting Center allows business professionals to easily and reliably reach across the web to collaborate and work, inside or outside their organization. The solution increases the reach, speed, and cost-effectiveness of business through media-rich web-based meetings that enable multiple parties to conduct business meetings online—regardless of where they might be. Cisco WebEx Meeting Center enables companies to extend their business models over the web in a high-touch yet low-cost manner.

Ideal for Companies That Need These Features

Cisco WebEx Meeting Center	• Ability to meet remote colleagues, customers, and partners online to share presentations and collaborate • Software as a Service (SaaS) delivery model that allows them to deploy a web conferencing solution over the web, eliminating the need for hardware and resources to maintain the infrastructure • A secure and reliable method to collaborate both inside and outside the firewall

Key Features

- Integrated live audio, video, and data—Easily create dynamic and persuasive multimedia presentations that integrate live audio, video, and data. Use powerful presentation techniques such as animations and Macromedia Flash to deliver the true presentation experience.
- Powerful annotation tools—Presenters and participants can annotate and make notes on documents as if on a white board, for concise and clear communication or editing.
- Meeting platform you can trust—When the technology fails there is no makeup session. Rest assured; all Cisco WebEx meetings run on Cisco WebEx Collaboration Cloud, ensuring security, reliability, and performance.
- Cisco WebEx Network Based Recording (NBR)—With a simple click, you can record all your events, which are then available for replay. Choose from multiple options such as requiring registration, destination URL, and post meeting surveys.
- Multiplatform—Let your prospects join your meetings on the platform of their choice: Windows, Mac, Linux, and UNIX.
- Join WebEx meetings on your smartphones including iPhone, BlackBerry, Nokia, and more.

For More Information

For more information about Cisco WebEx Meeting Center, visit: http://www.cisco.com/en/US/products/ps10409/index.html.

Cisco WebEx Training Center

Cisco WebEx Training Center is a hosted online training solution that enables you to deliver dynamic, interactive learning to anyone who has web access and a browser. Designed to provide instructors with flexible, easy-to-use tools that encourage interactions and engage learners, Cisco WebEx Training Center is the leading virtual classroom solution on the market. With this application, you can significantly decrease the cost of delivering live training, reach your learners more often, and reduce the time your learners spend away from their jobs and their customers.

Ideal for Companies That Need These Features

Cisco WebEx Training Center	• Online classroom for interactive learning • Comprehensive online learning management with registrations, testing, hands-on labs, and breakout rooms • Software-as-a-service (SaaS) delivery model that allows them to deploy a web conferencing solution over the web, eliminating the need for hardware and resources to maintain the infrastructure • Secure and reliable method to conduct events both inside and outside the firewall

Key Features

- Keep learners engaged and involved with Quick Response tools that make it easy for instructors and learners to communicate. These tools allow students to interact with instructors and other students with the click of an icon.
- Promote collaborative learning with virtual breakout sessions that allow students to break into small groups to work on projects, roll-play, or develop case studies. Instructors can roam from group to group to provide guidance and support.

- Provide remote learners with hands-on access to software training with Cisco WebEx Hands-On Labs. Accelerate the roll-out of software applications by providing students with access to remote lab computers for hands-on training through the Internet.
- Assess the understanding and ability of your learners to apply your training with the integrated Cisco WebEx Testing Engine. Deliver tests before, after, or during live training sessions, and integrate with LMS systems.
- Take full advantage of Cisco WebEx Integrated Audio to simplify the scheduling and management of audio sessions for your live online training programs. Innovative features such as Active Talker allow instructors and students to see who is speaking, promoting personal interactions and enabling instructors to "spot" audio distractions (hold music) and mute the line to minimize interruptions.
- Deliver live interactive training to learners regardless of their computing platform, with multiplatform support for Windows, Mac, Linux, Solaris, and UNIX.

For More Information

For more information about Cisco WebEx Training Center, visit: http://www.cisco.com/en/US/products/ps10410/index.html.

Cisco WebEx Event Center

Cisco WebEx Event Center is an online event-management application for you to manage the entire online event lifecycle from planning, promoting, and presenting to follow-up and analysis. Whether you need to increase your lead numbers, launch a new product, or hold all-hands company meetings, Cisco WebEx Event Center can help you cost-effectively target the right people—anywhere—and get your message across at every touch point, not just during a live online event.

Ideal for Companies That Need These Features

Cisco WebEx Event Center	• Ability to deliver marketing events and corporate events over the web • Comprehensive online event management with registrations, promotions, and follow-ups • Robust online event session features for high-quality, professional event production • Software-as-a-service (SaaS) delivery model that allows them to deploy web-based event management over the web, eliminating the need for hardware and resources to maintain the infrastructure • Secure and reliable method to conduct events both inside and outside the firewall

Key Features

- Sophisticated event management features that are easy for any technically novice marketers—From customizable HTML templates and event registration forms to automated lead management and lead scoring, Cisco WebEx Event Center has the features you need for a successful webcast that delivers the results you want, and allows you to integrate to your CRM application, such as Salesforce.com.
- Higher return on investment (ROI)—Extend the life of your events with Cisco WebEx Network Based Recording (NBR). With a simple click, you can record all your events, which are then available for replay. Choose from multiple options such as requiring registration or destination URL, or even posting surveys.
- Webcast platform you can trust—When the technology fails there is no makeup session. Rest assured; all Cisco WebEx events run on Cisco WebEx Collaboration Cloud, ensuring security, reliability, and performance.
- Audio broadcast—Cisco WebEx Event Center offers multiple audio options to meet your event needs and budget. Audio broadcast allows presenters to deliver over a regular telephone while the event participants listen through their computers.
- Multiplatform—Let your prospects join your event on the platform of their choice: Windows, Mac, Linux, or UNIX.

For More Information

For more information about Cisco WebEx Event Center, visit: http://www.cisco.com/en/US/products/ps10411/index.html.

Cisco WebEx Support Center

Cisco WebEx Support Center enables IT and customer support to reduce costs, increase the productivity of their technical support representatives, reduce customer downtime, and increase customer satisfaction by improving the efficiency and effectiveness of remote support.

Ideal for Companies That Need These Features

Cisco WebEx Support Center	• Ability to remotely deliver technical support as if onsite • Reduced support time and cost with anywhere, secure access for the customer and the support representative • Software-as-a-service (SaaS) delivery model that allows them to deploy a remote support solution over the web, eliminating the need for hardware and resources to maintain the infrastructure • Secure and reliable method to deliver technical support both inside and outside the firewall

Key Features

- View and control at application and desktop level—When providing support, customers can decide whether they want to share a single application versus their entire desktop. This feature is very important from the security perspective.
- Bring in subject matter experts easily and transfer the session or conference in others.
- Cisco WebEx Network Based Recording (NBR)—All support interactions can be recorded for auditing, tracking, and security purposes. Both audio and visual support session details are recorded.
- Sign on to a client's machine using firewall-friendly technology.
- Measure and improve support organization performance with detailed reporting.
- Performance, reliability, security, and 24-hour support—All Cisco WebEx support sessions run on the Cisco WebEx Collaboration Cloud, which offers better than 99.99-percent reliability and provides exceptional security. Information is never stored on our servers; we use 128-bit Secure Sockets Layer (SSL) and Advanced Encryption Standard (AES) encryption.
- Remotely access and manage computers—Through the use of Cisco WebEx Remote Support and Cisco WebEx Remote Access, you can remotely support and provide proactive support to computers anywhere is the world through the Internet, without the need to access firewalls and open ports on the customer site.
- Cross-platform compatibility—You can support your customers on multiple platforms, Windows, Mac, Linux, and UNIX.
- Integrate out-of-the-box with Salesforce.com and Remedy; application programming interfaces (APIs) are available for other technologies.

For More Information

For more information about Cisco WebEx Support Center, visit: http://www.cisco.com/en/US/products/ps10412/index.html.

Cisco WebEx Connect

Cisco WebEx Connect is an enterprise-class, on-demand unified communications client that delivers enterprise instant messaging, rich presence, and team spaces to bring people, data, and processes together. WebEx Connect delivers this through software-as-a-service, meaning no hardware to deploy, no capital expenditures and a much lower cost of maintenance and administration.

Ideal for Companies That Need These Features

Cisco WebEx Connect	• Unified communications and collaboration • Rich presence and enterprise instant messaging

Key Features

- One unified interface for business collaboration—Users can work with others as if they are in the same room, allowing them to make informed decisions in real time using rich presence, enterprise IM, video, voice over IP (VoIP), desktop sharing, and chat features. Integration with Cisco Unified Communications Solutions delivers transparent communication and collaboration.
- Cross-company collaboration—Users can work closely with colleagues, partners, or customers inside and outside your organization. They can create virtual team spaces where they can access shared assets instantly from any computer, including documents, and persistent discussions,
- Dynamic end-user collaboration without giving up control—Administrators can add, update, or deactivate users easily with batch functions and manage enterprise usage by creating any number of domains and subdomains.
- Avoidance of added infrastructure—Speed deployment and reduce maintenance costs by taking advantage of the Cisco WebEx Collaboration Cloud, a private global network that provides security, reliability, and scalability on demand. There is no hardware to purchase, maintenance or upgrade costs, and no long software deployment cycles.
- Security and accreditation—The Cisco WebEx Collaboration Cloud delivers data content security and uses Secure Sockets Layer (SSL) and Advanced Encryption Standard (AES) encryption; the application is audited against Sas 70-Type II.

For More Information

For more information about Cisco WebEx Connect, visit: http://www.webex.com/enterprise/webex-connect.html.

Cisco WebEx Advanced Services

Cisco WebEx Customer Advocacy offers a wide range of advanced services that can help customers reach and exceed their collaboration objectives. Cisco WebEx Advanced Services offers tailored services to help customers with collaboration specific needs including WebEx deployment and implementation, WebEx adoption, virtual training and eLearning, and on-line marketing. Cisco WebEx Advanced Services also offers personalized training programs that allow customers to receive private, tailored instructor-led training sessions for their employees. Product customization services are available for those customers who have unique requirements for their WebEx application such as single sign-on, directory integration, or e-commerce. For those customers who are hosting an important event, Cisco WebEx Advanced Services offers high quality video webcasting services, which allows customers to broadcast their events over the Internet with high quality video while also offering attendee interactivity such as chat and online Q&A.

Cisco WebEx Advanced Services teams follow industry standard project management processes. Additionally, our Advanced Services teams leverage the Cisco lifecycle approach to customer engagements: plan, prepare, design, integrate, operate, and optimize. Customers benefit from a consistent and programmatic approach to assessing their needs and receiving services that will net their desired results.

Key Services

- Enterprise implementation
- WebEx adoption
- eLearning and eMarketing consulting
- Personalized training programs
- Product customization
- Video webcast services

For More Information

For more information about Cisco WebEx Advanced Services, visit http://www.webex.com/product-overview/professional-services.html or contact us at AdvancedServicesSalesTea@webex.com.